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Elucidating the *Tractatus*

Wittgenstein's Early Philosophy of Logic & Language



Marie McGinn

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*Wittgenstein's Early Philosophy
of Logic and Language*

MARIE MCGINN

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Preface

The original impulse to write this book had its origins in the renewed interest in the *Tractatus* that was provoked by the work of Cora Diamond and James Conant. Like many other readers of Wittgenstein's famously obscure early work, I felt that Diamond and Conant gave exceptionally clear and forceful expression to the failings of the sort of metaphysical interpretation of the *Tractatus* that had come to dominate the interpretative literature. According to the view they criticize, Wittgenstein's early work is committed to a form of realism that attempts to ground the logical structure of our language in the independently constituted structure of reality. The work is held to present an account of the relation between language and the world which entails, not only that the account itself cannot be expressed in propositions, but that the world's structure is something that cannot be represented: shows itself in the logical structure of our language. Occasional attempts to teach a course on the *Tractatus* had led to a growing dissatisfaction with this style of interpretation, but I had very little sense of a possible alternative to it. The alternative offered by Diamond and Conant is notoriously robust: the work does not contain an account of the relation between language and the world. It is rather an attempt to lead a reader from an impulse to provide such an account to the realization that any such attempt results in sheer nonsense. The valuable lesson of the work, on their interpretation, is the realization that the idea that there is a perspective outside language, from which we can explain its capacity to represent the world, is an illusion. Although I found their work both liberating and inspiring, I was never fully persuaded by the self-denying ordinance that they impose on any successful interpretation of Wittgenstein's work, namely that it avoid finding in it any positive philosophical insights into how language functions. The motivation for writing this book lay in the sense that there must be a third option. On the one hand, there must be no suggestion that Wittgenstein puts forward an account of the relation between language and the world that must, by its own estimation, be conveyed by means of propositions that are strictly nonsensical. On the other hand, there must be some way of showing that the work is intended to achieve genuine philosophical insights into the nature of a proposition

and the nature and status of logic, by means of an investigation that is entirely internal to language. This would, I believed, not only bring the philosophical method of the early work much closer to that of the later, but show that the later work has its roots in insights that Wittgenstein achieves in the *Tractatus*.

The aim of this book is to provide a fully worked out version of this third interpretative approach to Wittgenstein's early work. Quite how difficult the task was only became fully clear to me once I had embarked on it and had begun to work systematically through the text. A number of interpreters believe that the book simply does not permit a consistent reading, and at times it seemed that only Diamond and Conant's heroic willingness to hold that the entire point of the work is to realize that it is nonsense could prevent the accusation that Wittgenstein falls, willy-nilly, into putting forward metaphysical theses about the essential structure of the world. Certainly, I was not always confident that the interpretative thread I felt I had hold of would not simply break. And even though I have, in the end, put forward an interpretation of the work on which it achieves philosophical insights by means of a method that can plausibly be held to be merely clarificatory, I am also inevitably obliged to acknowledge that the work contains ideas that are philosophically untenable, that it is dogmatic, and that it presents ideas that are in fundamental tension with one another. However, I believe that though this amounts, in some sense, to a recognition that Wittgenstein's early work is philosophically flawed, I believe that the defects of the book also add to its intensity and to the purity of the form in which its central and lasting insights find their expression. As Wittgenstein himself remarked, in a conversation with Waismann in 1931, 'I saw something from far away and in a very indefinite manner, and I wanted to elicit from it as much as possible' (*WVC*, p.184).

Although my final abandonment of a metaphysical or realist interpretation of the *Tractatus* was inspired by reading the work of Diamond and Conant, I gradually came to realize that the interpretation I develop belongs to an anti-metaphysical approach to the work that is associated with interpreters such as Rush Rhees, Peter Winch, Hide Ishiguro, and Brian McGuinness. Many of the interpretative claims I make are also found in their work; if there is something distinctive in what is presented here, it is that I have developed this interpretative approach in more detail and at greater length, and have tried to ground it systematically in the ferociously demanding details of the text.

With one exception, the chapters of the book follow closely on the order of Wittgenstein's remarks, even where this has meant a degree of repetition, as Wittgenstein often approaches the same topic from slightly different angles. The exception is the treatment of the metaphysical-sounding remarks that open the work, which I discuss only in Chapter 6, when the central ideas of my interpretation are already in place. To some extent, this approach is justified by the fact that the remarks with which the work begins were some of the last to be written. However, I also believe that these remarks are some of the most treacherous in the book and that they cannot safely be treated as a way into the work. Rather, it is only when one has a settled view of the work as a whole that the opening remarks can be approached with any confidence. I try to show that, once the nature of Wittgenstein's investigation of the nature of a proposition is understood, the opening remarks undergo a change of aspect: we come to see that what we thought was metaphysics is merely a reflection of the logic of our language.

The first chapter of the book places the interpretative approach that I take in the context of the current debate between the so-called traditional and so-called resolute reading of Diamond and Conant. Although I argue that the interpretative tradition to which my reading belongs provides a distinctive, third approach to the work, I also try to bring out its clear affinities with the interpretations of Diamond, Conant, Ricketts and others. The second and third chapters of the book spend some time detailing the philosophical agenda that forms the background to Wittgenstein's development of the ideas and the approach of the *Tractatus*. I believe that understanding this agenda is essential to an understanding of the work itself, and the interpretation I develop is grounded in a particular view of the problems that Wittgenstein himself identifies in what he understands to be the views of Frege and Russell. Chapters 4–10 present the details of the interpretative exposition of Wittgenstein's remarks on the nature of a proposition and the nature and status of logic. Chapter 11 discusses the remarks on solipsism, which, I argue, are integral to the discussion of logic and language. A final chapter provides a brief discussion of the relation between the early and the later philosophy, in which I argue that the *Philosophical Investigations* is not a rejection of the central insights of the *Tractatus*, but a transformation or re-thinking of them within the context of an approach to language that has thrown off the dogmatism and preconceptions of the early work. There are a number of topics in the *Tractatus* that I do not discuss: I touch only briefly on the treatment of

arithmetic and the laws of science, and I do not discuss the remarks on ethics and aesthetics at all. This is partly because I have already written a long book, but mainly because I wanted to focus on what I believe to be the heart of the work: its treatment of the nature of a proposition and the nature and status of logic.

Marie McGinn
July 2006

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I would like to thank a number of people for invaluable help in writing this book. I am indebted to the published writings of many people, but the work of James Conant, Cora Diamond, and Tom Ricketts has been particularly important in stimulating the thoughts that are presented in this book. Although I would not call the interpretation I present a resolute reading of the *Tractatus*, and even though I argue that it is an alternative to the resolute reading, I have nevertheless been greatly influenced by this style of interpretation, both by its criticisms of what had become the traditional reading of the *Tractatus* and by its attempt to read the book in a way that avoids finding a certain sort of metaphysics in it.

I would also like to thank particular individuals for comments on drafts of sections of the book: Oskari Kuusela, Soren Stenlund, Chon Tejedor, and Tom Stoneham. I am particularly indebted to Peter Sullivan for very detailed critical comments on an early draft of the first six chapters of the book, and also for his generosity and patience in explaining his own ideas in numerous, lengthy conversations. I know that he has saved me from many errors and helped me to understand important details. I have also benefited greatly from hearing work presented by a large number of people at the regular workshops on the *Tractatus*, organized by Peter Sullivan and Michael Potter, at the University of Stirling. I gave a series of lectures on the *Tractatus* to the Philosophy Department at the University of Uppsala, Sweden, and to the Graduate Philosophy Seminar at the University of Åbo, Finland. I would like to thank Sören Stenlund and Lars Hertzberg, respectively, for inviting me to present my work; I would like to thank all those who attended the classes for very helpful discussions of Wittgenstein's ideas. I am also grateful to the members of the Philosophy Departments at York, UEA, Birmingham, Nottingham, Lampeter, and Birkbeck College London, to the Welsh Philosophical Society, and to the Stirling Workshop for helpful discussions of my work. Finally, I would like to thank Stephen Everson both for many telephone conversations in which his patient but sceptical response to ideas helped me work out the details of my interpretation, and for his invaluable stylistic suggestions.

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List of Abbreviations

- CL *Ludwig Wittgenstein: Cambridge Letters: Correspondence with Russell, Keynes, Moore, Ramsey and Sraffa*, ed. B.McGuinness and G.H.von Wright, (Oxford: Blackwell, 1995)
- NB *Notebooks 1914–1916*, 2nd edition, ed. G.H.von Wright and G.E.M.Anscombe, trans. G.E.M.Anscombe, (Oxford: Blackwell, 1979)
- NDM ‘Notes Dictated to G.E.Moore in Norway, April 1914’, Appendix II of *Notebooks 1914–1916*
- NL ‘Notes on Logic, 1913’, Appendix I of *Notebooks 1914–1916*
- PG *Philosophical Grammar*, ed. R.Rhees, trans. Anthony Kenny, (Oxford: Blackwell, 1974)
- PI *Philosophical Investigations*, 2nd edition, ed. G.E.M.Anscombe and R.Rhees, trans. G.E.M.Anscombe, (Oxford: Blackwell, 1998)
- PR *Philosophical Remarks*, ed. R.Rhees, trans. R.Hargeaves and R.White, (Oxford: Blackwell, 1975)
- PT *Prototractatus*, ed. B.F.McGuinness, T.Nyberg, and G.H.von Wright, trans. D.F.Pears and B.F.McGuinness, (London: Routledge, 1996)
- RFM *Remarks on the Foundations of Mathematics*, 3rd edition, ed. G.H.von Wright and G.E.M.Anscombe, trans. G.E.M. Anscombe, (Oxford: Blackwell, 1978)
- ROC *Remarks on Colour*, ed. G.E.M.Anscombe, trans. L.L.McAlister and M.Scattle, (Oxford: Blackwell, 1977)
- SRLF ‘Some Remarks on Logical Form’, in *Philosophical Occasion 1912–1951*
- TLP *Tractatus Logico-Philosophicus*, trans. D.F.Pears and B.F.McGuinness, (London: Routledge, 1971)
- WVC *Wittgenstein and the Vienna Circle: Conversations recorded by Friedrich Waismann*, ed. B.F.McGuinness, trans. J.Schulte and B.F.McGuinness, (Oxford: Blackwell, 1979)

1

The Single Great Problem

1. The principal aim of this book is to present an interpretation of Wittgenstein's early philosophy of logic and language. It is impossible to undertake this task of interpretation without confronting the question of the relation between Wittgenstein's early thought and his later philosophy. In the Preface to the *Philosophical Investigations*, Wittgenstein writes:

Four years ago I had occasion to re-read my first book (the *Tractatus Logico-Philosophicus*) and to explain its ideas to someone. It suddenly seemed to me that I should publish these old thoughts and the new ones together: that the latter could be seen in the right light only by contrast with and against the background of my old way of thinking. (*PI*, p.x)

It is important that Wittgenstein does not speak here of seeing his later work in the right light only 'by contrast with' his early work, but 'by contrast with and against the background of my old way of thinking'. The idea that the later work should be seen 'against the background' of Wittgenstein's early philosophy suggests that we should not see the former as an outright rejection of the latter. Rather, it suggests that we shall understand the later work better if we see it as something that develops out of, or has its roots in, the early work. The interpretation that follows is an attempt to make sense of this idea that the *Philosophical Investigations* is, in an important sense, a development of the ideas of the *Tractatus*.

One of the central themes of Wittgenstein's later dialogue with his early self focuses on the relation between meaning and use. The structure of this dialogue is exemplified in the structure of the opening paragraph of the *Investigations*. On the one hand, Wittgenstein gives expression to the temptation to think of the meaning of an expression as something that is correlated with it. He extracts this idea from a passage from St Augustine's *Confessions*, but it is an idea that clearly plays an important role in his own early thought. On the other hand, he takes the first important steps in a journey of investigation

whose ultimate aim is to liberate us from the grip that this picture of meaning has upon our thought, and redirect our attention to the application or use of words within the context of our active, everyday lives. In claiming that the later philosophy is to be understood as a development of Wittgenstein's early work, I'm suggesting, among other things, that it is a mistake simply to identify the voice of the early Wittgenstein with the Augustinian conception of meaning that he now sets out to diagnose and resist.

One of the central aims of what follows will be to present an interpretation of the early work on which both voices in the dialogue that occurs in the opening sections of the *Investigations*—the Augustinian voice and the voice that resists the temptations it expresses—are seen to have their roots in the ideas of the *Tractatus*. Thus, the move that the later Wittgenstein makes away from the idea that the meaning of a word is something that is correlated with it, and towards the idea that the meaning of a word is its use in the language-game, is, it will be argued, an evolved or transformed expression of an insight that is central to his early work. The two ideas of meaning—what he sometimes calls the 'stationary' and the 'dynamic' ideas of meaning—coexist alongside one another in the early work, but from the perspective of the later philosophy, it is the emerging recognition of the connection between the meaning of a symbol and its use in significant propositions that is one of the central achievements of the early work. The idea of use that is present in the early work is an idealized and etiolated one that reflects the early Wittgenstein's preoccupation with the concept of representation. In the later work, the conception of use is clearly much richer and more concrete; the emphasis is on our life with language, rather than on the concept of representation. Nevertheless, I will argue that we can see the later Wittgenstein as building upon his early recognition of the connection between meaning and use, and that in the long opening dialogue of the *Investigations* we see him using the developed form of this recognition to expose the illusions about meaning to which his early self fell victim.

2. Wittgenstein describes the view that he extracts from the passage from St Augustine's *Confessions* in *PI* 1 as follows: 'the individual words in language name objects—sentences are combinations of such names.' He goes on:

In this picture of language we find the roots of the following idea: Every word has a meaning. This meaning is correlated with the word. It is the object for which the word stands. (*PI* 1)

Wittgenstein describes this picture, in *PI* 2, as 'a primitive idea of the way language functions', and adds 'one can also say that it is the idea of a language

more primitive than ours.’ The language of the builders that Wittgenstein describes in *PI 2* is intended to provide an example of a language that fits this primitive idea of how language functions. The language consists of four words—‘Block’, ‘Pillar’, ‘Slab’, ‘Beam’—and we are asked to ‘[c]onceive [it] as a complete primitive language’ (*PI 2*).

This primitive view of language sounds, clearly, very close to ideas that Wittgenstein himself expresses in the *Tractatus*:

The simple signs in propositions are called names.

The name means an object. The object is its meaning.

The configuration of objects in a situation corresponds to the configuration of simple signs in the propositional sign. (*TLP* 3.202–3.21)

The affinity of these ideas to those that Wittgenstein attributes to Augustine is undeniable. However, there is a question as to the nature of the picture of meaning that is being expressed. According to one well-established interpretative tradition, the picture expresses a realist theory of meaning, which conceives the representing relation as consisting in the existence of a direct link between bits of language (words) and bits of the world (objects). On this view, language’s ability to represent possible states of affairs is grounded in the links that are forged, as it were, outside the context of a proposition, between individual expressions and objects that exist prior to and independently of language.

David Pears characterizes this form of realism as follows:

In the *Tractatus* the beginning of language is the naming of objects. Objects are set in a fixed grid of possible states of affairs, which is in no way dependent on any contribution made by our minds. (Pears, 1987, p.9)

Thus, according to Pears, Wittgenstein’s early view is that the possibility of factual discourse depends upon the existence of simple objects, each with its intrinsic set of possibilities for combining with other objects in states of affairs. These simple objects correspond to the simple names in a fully analysed proposition. A name is ‘first . . . attached to an object in something like the way envisaged by Russell’, but it continues to represent the object ‘only as long as the possibilities presented by the propositions in which it occurs are real possibilities for that object’ (Pears, 1987, pp.103–4). A name’s possibilities for combining with other names to form propositions must mirror the intrinsic possibilities of the object for combining with other objects in states of affairs. Thus, the logical structure of language is imposed on it

from outside, ‘by the ultimate structure of reality’ (Pears, 1987, p.27). It is in virtue of this isomorphism between the logical structure of language and the independently constituted structure of reality that the connection between language and the world is made; the isomorphism explains language’s ability to represent the world. The realist interpretation of the *Tractatus* goes on to argue that, although Wittgenstein’s remarks are intended to communicate the above conception of how language is tied to the world, one of the consequences of the explanation that is thereby communicated is that the structure of the world, which language essentially mirrors, cannot be expressed in significant propositions. Significant propositions represent possible states of affairs. The structure of the world is necessarily mirrored in language, but it cannot be described in language. The structure of the world—the possibilities for objects to combine in states of affairs—cannot be described, but it makes itself manifest in the possibilities for combining names in significant propositions. Thus, we come to see that the possibility of our expressing thoughts about the world depends upon language’s mirroring features of an independent reality that are shown by language but cannot be said: the attempt to say them results in nonsense.¹

3. The idea that Wittgenstein endorses this form of realism in the *Tractatus* has always had its detractors. For example, Rush Rhees, Peter Winch, Hide Ishiguro, and Brian McGuinness have all argued against the view that Wittgenstein set out, in the *Tractatus*, to provide a metaphysical basis for the logical structure of our language.² They each see Wittgenstein as engaged in a form of logical investigation whose aim is to lay bare how the expressions of our language function. Thus, Hide Ishiguro argues against the idea, central to a Pears-style reading, that Wittgenstein ever subscribed to the view that the identity of an object that a name denotes is something that is determined prior to, and independently of, the use of the name in propositions. She argues that the difference between the *Tractatus* and the *Philosophical Investigations* does not lie in ‘the presence or absence of the “use” concept but [in the fact] that the *Tractatus* concept of “use” is much less comprehensive than in the *Investigations*. That is to say, in the *Tractatus* Wittgenstein is interested in the problem of the role expressions play in a language, which he considers only in relation to

¹ Other interpreters who find a realist theory of meaning in the *Tractatus* include Norman Malcolm (Malcolm, 1986), Max Black (Black, 1964), G.E.M. Anscombe (Anscombe, 1971), Peter Hacker (Hacker, 1986 and 1996), and Anthony Kenny (Kenny, 1973).

² See H. Ishiguro, 1969; B. McGuinness, 1981 and 1985; R. Rhees, 1960, 1963, 1966, and 1969; P. Winch, 1981 and 1987.

the truth-stating purpose of language' (Ishiguro, 1969, p.21). As Ishiguro sees it, the concept of an object, properly understood, is an intensional one, which emerges in the context of understanding the role that is played by the logical constituents of propositions, and it cannot be understood independently of this. Brian McGuinness also denies that it was ever Wittgenstein's intention to claim 'that there is something by which our grammar is determined', and argues that 'he did not try to infer features of the world from our language' (McGuinness, 2002, p.62). Like Ishiguro, McGuinness wants to see Wittgenstein as primarily concerned with the problem of making clear the logic of our language, of seeing clearly into the workings of our language, that is, as engaged in an investigation that is internal to language.³

4. The realist interpretation of the *Tractatus* has also been challenged, by a reading of Wittgenstein's early work put forward by Cora Diamond and James Conant, known as the 'resolute' reading.⁴ Diamond and Conant argue that the idea, central to the realist reading, that there are thoughts that are true, but which cannot be expressed, is contrary to the principal lesson of the *Tractatus*, namely that, tautologies aside, combinations of signs that do not express a sense are simply and straightforwardly nonsensical. Insofar as the remarks of the *Tractatus* are not tautologies and yet fail to express a sense, they are plain nonsense: nothing is communicated by means of them. The purpose of Wittgenstein's remarks, on their view, is fundamentally a therapeutic one, namely to show that what appear to be statements about the nature of language and its relation to the world are in fact 'real nonsense, plain nonsense' (Diamond, 1991a, p.181). This interpretation shares with the anti-metaphysical reading, of Rhees, Winch, Ishiguro, and McGuinness, the rejection of the idea that Wittgenstein ever engages in the sort of theorizing about the relation between language and an independent, or transcendent, reality that the so-called traditional reading claims.

It is a point of agreement among all these anti-metaphysical interpreters that, despite the striking differences in style, the early and the later philosophy are united in their rejection of the very possibility of taking what John McDowell

³ Winch makes the same point as follows: 'It is . . . inadmissible to try to account for the meanings of names by reference to their relation to something non-linguistic. What distinguishes an expression which has a meaning (and is, therefore, a name) from one which does not can only be something to do with its role *in* language' (Winch, 1987, p.7).

⁴ See C.Diamond, 1988 and Introduction to 1991a, pp.13–37; J.Conant, 1991 and 2002. Other resolute readers of the *Tractatus* include Tom Ricketts (Ricketts, 1996), Warren Goldfarb (Goldfarb, 1997) and Michael Kremer (Kremer, 2001).

calls 'a sideways on' perspective on language. All of them hold that Wittgenstein is always implacably opposed to the sort of metaphysical theorizing about the relation between language and the world that Pears and others hold that he rejects only in the later philosophy. However, while Rhees, Winch, Ishiguro, and McGuinness allow that Wittgenstein sets out to achieve positive insights into how our language functions, Diamond and Conant want to see Wittgenstein's aims as purely therapeutic, and to deny that Wittgenstein undertakes any positive philosophical task. Thus, although it is possible to see Diamond and Conant as continuing a well-established anti-metaphysical interpretative tradition, they are distinctive in wanting to press the idea that Wittgenstein's early philosophy is anti-theoretical, to its logical limits. The reading to be developed here belongs, like Diamond's and Conant's, to the anti-metaphysical tradition, but, in the tradition of Rhees and others, it stops short of claiming that this is incompatible with reading the work as aiming to present positive philosophical insights into the nature of language.

5. How, then, might a non-resolute, anti-metaphysical reading of Wittgenstein's early work understand the temptation that he later believes to be expressed by the picture of meaning as something that is correlated with a word? Clearly, the picture is not to be understood as the idea, central to Pears's conception of realism, that the use of a name in a proposition is dictated from the outside, by the intrinsic nature of the object that it stands for.⁵ According to the anti-metaphysical reading, Wittgenstein is already deeply committed to the idea that matters are exactly the other way round: the meaning of an expression is internally related to the role that the expression has within a system of representation in which we say things that are true or false.⁶ There is,

⁵ There are remarks in the *Notebooks* in which Wittgenstein expresses ideas along these lines, for example: 'A name designating an object thereby stands in a relation to it which is wholly determined by the logical kind of the object and which signalizes that logical kind' (*NB* p.70). However, none of these remarks survive into either the *Prototractatus* or the *Tractatus*. Although this is not on its own enough to undermine a realist reading of the *Tractatus*, it nevertheless encourages the thought that this line of thought is one that Wittgenstein rejects. He certainly appears to express quite the opposite view in both the *Prototractatus* and the *Tractatus*:

In logical syntax the meaning of a sign should never play a role. It must be possible to establish logical syntax without mentioning the *meaning* of a sign: *only* the description of expressions may be presupposed. (*PT* 3.20151; *TLP* 3.33)

⁶ For example, Ishiguro writes: '[In the *Tractatus*] it is the use of the Name which gives you the identity of the object rather than vice versa' (Ishiguro, 1969, p.34); McGuinness writes: 'Only in a proposition does a name have meaning, so that there cannot be a prepropositional act of giving a meaning to a name'; 'Reference is a function of fact-stating, not vice versa' (McGuinness, 1985/2002, p.96 and p.98, respectively).

therefore, no question of grounding the possibilities for using expressions in propositions with sense in the intrinsic structure of an independent reality. However, even with the rejection of the idea that the use of a word is grounded in, or explained by, something outside language, there is still a temptation to think that there is a vital role for the notion of meaning as something over and above the use of a word, as something that is correlated with a word, as something that we grasp in coming to understand it.⁷ It might seem, for example, that such an idea of meaning is essential in order to account for our ability to understand a new proposition in which a word occurs, without having its sense explained to us. Thus, some such idea of meaning seems to be invited by our ability to grasp the meaning of a word ‘in a flash’; it seems to explain how we can then go on to use the word correctly in new propositions. The concept of a simple object that is correlated with a name emerges, I want to argue, in the context of this conception of the meaning of a word as something that we grasp and which explains our ability to understand the sense of propositions in which the word occurs, without having their sense explained to us. As both Ishiguro and McGuinness remark, the idea of the object that is the meaning of a name that emerges in this context does not correspond in any way to our ordinary notion of particular, concrete objects that constitute parts of empirical reality. In Chapter 5, I will follow their attempts to provide an interpretation of the concept of an object that dissociates it completely from the sort of realist theory of meaning that is put forward by Pears and others.⁸

Thus, I shall argue that it is not a version of realism, but the temptation to think that there is some explanatory role for the notion of meaning as something that is correlated with a word, something that comes to mind

⁷ Although Wittgenstein uses the terms ‘*bedeutet*’ and ‘*Bedeutung*’ to describe the relation between a name and an object, I will argue that the role that the concept of an object plays in the *Tractatus* brings it much closer to the notion of the meaning of a name than to the notion of the bearer or reference of a name. The fundamental mistake that lies behind Wittgenstein’s talk of the meaning of a name as something that is correlated with it is, on this interpretation, the mistake of thinking that the meaning of a name is something that we grasp when we understand a word, whereas the use is something extended in time. It is, I want to argue, this ‘stationary’ conception of meaning that is at work in the *Tractatus*.

⁸ Hide Ishiguro writes: ‘To suppose either that objects of the *Tractatus* are spatio-temporal things, or that they are sense data, lands us in similar difficulties. To ask what kind of familiar entities correspond to the objects of the *Tractatus* seems to lead us nowhere’ (Ishiguro, 1969, p.47). Similarly, McGuinness argues that it cannot be correct to conceive of Wittgenstein’s objects as ‘concrete objects which may sensibly be said to exist or not exist’ (McGuinness, 1981/2002, p.93). What makes it so difficult to understand Wittgenstein’s concept of an object is, I want to claim, precisely that its role is closer to the idea of the meaning of a name than it is to our ordinary notion of what a name refers to, i.e. the bearer of a name.

when we say a word and understand it, that Wittgenstein succumbs to in the *Tractatus*, and which he attributes to Augustine at the opening of the *Investigations*. The later Wittgenstein sets out to liberate us from the picture, not because it expresses an attempt to ground the structure of language in the structure of an independent reality, but because it is a philosophical chimera that explains nothing, but which ‘surrounds the working of language with a haze that makes clear vision impossible’ (*PI* 5). Thus, when we try to clarify what the idea of meaning as something correlated with a word amounts to, it crumbles away to nothing: whatever we can point to as the correlate of a word is just another symbol; we never arrive at the “meaning”. What Wittgenstein tries to show is that the idea that the meaning of a word is something that corresponds to it has its roots in a confusion between the meaning of a name and its bearer. The grip of this primitive, but ultimately empty and confused, idea of meaning on Wittgenstein’s early thought is clearly very strong. However, I want to argue that the idea that the meaning of a word is the object it stands for goes against the current of some of the central innovations of Wittgenstein’s early approach to the problem of understanding how language functions. It is, moreover, these innovations that remain, in a transformed version, fundamental to his later philosophy.

6. One of the difficulties for realist interpretations of the early philosophy is Wittgenstein’s own early insistence that philosophy ‘is not a body of doctrine’ (*TLP* 4.112), but is ‘purely descriptive’ (*NL*, p.106).⁹ Diamond’s and Conant’s critiques of the traditional reading of the *Tractatus*, as I noted just now, place great emphasis on the need to take the early Wittgenstein at his anti-theoretical word, which they each interpret as incompatible with supposing that any positive philosophical insight is conveyed by his remarks. However, even those who have a less rigorous understanding of what it is to be anti-theoretical are committed to denying that Wittgenstein puts forward anything that could properly be called a theory of the relation between language and reality, which is intended to provide an explanation of language’s ability to represent the world.

⁹ The tendency of such readings is to claim that Wittgenstein’s philosophical practice is at odds with his explicit pronouncements on the nature of philosophy. For example, Peter Hacker writes: ‘To understand Wittgenstein’s brief remarks about philosophy in the *Tractatus*, it is essential to realize that its practice and its theory are at odds with each other. The official *de jure* account of philosophy is wholly different from the *de facto* practice of philosophy in the book’ (Hacker, 1986, p.12).

The central idea of the form of anti-metaphysical reading that I want to develop is that Wittgenstein is engaged in a project of clarifying, rather than explaining, the workings of our language. But if Wittgenstein's insistence that he puts forward no doctrines, that he is essentially involved in a project of description or clarification, is one of the most striking continuities between the early and the later philosophy, it is also one of the most perplexing. How could Wittgenstein have taken himself, in each of these contrasting works, to be engaged in a task whose aim is, in some sense, purely clarificatory? And this question is clearly linked with another: How, on an anti-theoretical reading of Wittgenstein's philosophical aims, can his philosophy, which is allegedly free of philosophical doctrine, be understood to evolve or develop? One might argue that one of the great advantages of the traditional understanding of Wittgenstein's philosophical development is that it at least has a clear story to tell when it comes to accounting for the great discontinuity in style between Wittgenstein's two great works. The interpretive challenge that these questions pose is particularly demanding for those who accept the requirements that Diamond and Conant believe to be entailed by Wittgenstein's rejection of philosophical theory. A resolute reading of Wittgenstein's early work requires, first of all, a reading of the *Tractatus* that avoids committing Wittgenstein to any positive view of how language functions; and secondly, an account that explains, consistently with this, how Wittgenstein's philosophy evolves and changes over time.

7. The defining idea of the resolute reading of Wittgenstein's early work is that to read the *Tractatus* properly, as Wittgenstein intends us to read it, is to recognize that its sole aim is to expose philosophical nonsense as nonsense. Furthermore, it is to recognize that Wittgenstein's critique of philosophy is not mounted from the perspective of a commitment to a theory of what constitutes sense or nonsense, but is pursued piecemeal, in a way that has often been taken as distinctive of his later work. Diamond and Conant fully acknowledge the onus on them to provide a way of understanding Wittgenstein's development that avoids committing him to substantial doctrines that he either modifies or abandons completely. They claim, however, that this demand can be met.

Diamond, for example, argues that 'we see the change in Wittgenstein's view of clarity as central in the transformation that his thought underwent' (Diamond, 2004a, p.201). In the *Tractatus* Wittgenstein's therapeutic task is to show that what appear to be statements about the nature of language and

its relation to the world are in fact ‘real nonsense, plain nonsense’ (Diamond, 1991a, p.181), and that the questions they appear to answer are not genuine questions at all. If the therapy works, then by the end of the book we have come to recognize that the task of philosophy is not the formulation of philosophical theories, but the clarification of propositions. This work of clarification is undertaken case by case, and it may either succeed in making what someone means by his words clear, or show that he in fact means nothing. On Diamond and Conant’s interpretation, the *Tractatus* itself serves as an example of this process of clarification in the following way: Wittgenstein begins by making prima facie metaphysical claims about language and the world, only in order to go on to show that they are nonsense. What, in Diamond’s view, differentiates the *Tractatus* from the later philosophy is the following:

[T]he questions which we supposedly renounce in the *Tractatus*, and supposedly recognize not to be questions, nevertheless shadow the kind of clarification which the *Tractatus* recommends. The book leaves us with a method that is in the shadow of the big questions we had been asking. The search for the essence of language is, in theory, *überwinden*, overcome. But it is really still with us, in an ultimately unsatisfactory, unsatisfying conception of what it is to clarify what we say. (Diamond, 2004a, p.207)

Diamond believes that we might see the influence of questions about the essence of language on Wittgenstein’s early conception of clarification as indicating that the *Tractatus* is ‘unwittingly metaphysical in some respect or other’ (Diamond, 2004a, p.208). Wittgenstein does not succumb to the sort of metaphysics that a Pears-style reading finds in it, namely the sort that aims to explain how language connects with a transcendent world that has its own, intrinsic logical structure. However, Wittgenstein’s concern with general philosophical questions about how language functions leaves him, Diamond suggests, with a preconception of ‘the general logical character of all thought and speaking and inferring’ (Diamond, 2004a, p.208), which colours his early idea of how the work of clarifying propositions must be undertaken. For example, although the remarks about the truth-functional character of logic are overcome, or seen to be nonsense, Wittgenstein nevertheless retains a picture of the general character of logic which prevents him from paying ‘attention to differences, to the complex reality of our propositions and our mode of inferring, or to the reality of our particular philosophical difficulties’ (Diamond, 2004a, pp.208–9). Thus, Wittgenstein approaches the piecemeal

task of clarification from the perspective of a dogmatic, methodological commitment to the possibility of analysing all the propositions of ordinary language into truth-functional combinations of elementary propositions. To this extent, Wittgenstein's early work falls into a form of dogmatism that, although it is primarily methodological, can nevertheless be described as metaphysical. Wittgenstein's commitment to a particular conception of analysis shows that he has not yet succeeded in throwing off the influence of the kind of philosophy of language that the work as a whole sets out to undermine.

Diamond believes that it takes a long time for Wittgenstein to overcome the influence of the idea of a response to what she calls the 'Big Questions of the nature of language, or the conditions of sense' (Diamond, 2004a, p.209). He has to find a method of approaching the task of clarifying the sense of our words that resists our natural tendency to treat particular cases on the model of a preconceived idea of meaning, or in the light of 'some . . . general account of language' (Diamond, 2004a, p.211). The aim of the later work is not only to reject the possibility of a philosophy of language and replace it with an approach that is purely descriptive, but also to shake off the distorting influence that philosophical conceptions of language have on this descriptive task. According to Diamond, the early Wittgenstein did not intend to provide an answer to any Big Question about language, but he could not escape the influence of substantial ideas concerning the nature of language on his conception of what description would reveal. The temptation that he succumbs to is, in part at least, a temptation to value generalizations over the particular case. Diamond understands the evolution of Wittgenstein's conception of clarification in terms of his learning how to attend to the specific details of the particular case, how to proceed strictly case by case, allowing his puzzlement to be removed by the particular details without even thinking in terms of answers to Big Questions:

The real difficulty is in not thinking Big Questions; the real discovery is how not to do it. When Wittgenstein said 'Don't think, look', the hardness of looking is that of seeing the case with which we are puzzled as treatable genuinely on its own, the hardness of letting what can be said about it help, letting it satisfy us. This is at the heart of his later conception of clarification. (Diamond, 2004a, p.211)

8. There is a great deal in Diamond's account of the evolution of Wittgenstein's philosophy with which I want to agree. She is, for example, surely right when she suggests that the *Tractatus* is, despite itself, in the grip of

certain preconceptions about the essence of language, and that this prevents Wittgenstein from seeing, or even attending to, our ordinary use of language in all its richness and complexity. Equally, there is a clear sense that by the time he writes the *Investigations*, Wittgenstein's approach to the task of clarification has undergone a profound change, and that he now feels himself to have found a way of approaching this task of clarification in a way that is free of philosophical prejudices or preconceptions. However, one can agree with all this while resisting the full rigours of Diamond and Conant's resolute reading. Thus, as already indicated, the general line to be taken here will be that Wittgenstein's rejection of philosophical doctrine is not incompatible, in either the early or the later philosophy, with an intention to provide what might properly be regarded as a philosophical insight into how language functions. On this view, the work of clarification that Wittgenstein undertakes is to be understood as having a positive, as well as a negative, purpose: the aim, in both the early and the later philosophy, is that we should come to see clearly into the workings of our language. This suggests that we should not approach the task of understanding the relation between the early and the later philosophy in purely methodological terms. There is, on this interpretation, also a question of the relation between the logical investigations that Wittgenstein undertakes in the early and the later work: both the approach that he takes towards it and the philosophical lessons that it achieves.

How, then, are we to account for the profound differences between the early and the later philosophy in respect both to Wittgenstein's approach to his task and to the picture of language that appears to be its outcome? I believe that we shall find the answer to these questions in a number of preconceptions which form the framework for Wittgenstein's early work, and which he makes a focus for philosophical treatment in the *Investigations*. It is these preconceptions, I shall argue, that dictate the nature of Wittgenstein's early conception of his task, and the approach that he takes to the work of clarification that he believes it calls for. These preconceptions include the idea that sense must be determinate, that there is a common essence to all representation of states of affairs, and that the meaning of a word is something that is correlated with it; together these preconceptions amount to a preconceived idea of language as an exact calculus operated according to precise rules. I want to argue, however, that even though Wittgenstein's early investigation of how language functions is directed towards this idealized picture of language, it is also the case that his ability both to recognize and to rid himself of

his early preconceptions is in large measure due to insights that he achieves in his early work *despite* their influence.¹⁰

Thus, what is achieved in the *Tractatus*—despite Wittgenstein’s susceptibility to a primitive idea of meaning and to a mythological idea of a proposition and the essence of representation—is a recognition that how language functions, how a symbol symbolizes, is something that language itself makes clear: we do not need to go outside language in order to understand how it symbolizes in the way that it does.¹¹ The philosophical understanding that is achieved in the *Tractatus* centres on the recognition of the autonomy of language.¹² It is this commitment to the autonomy of language that underlies Wittgenstein’s early recognition of the connection between meaning and use, and his early treatment of the nature and status of logic. I want to argue that the roots of the later philosophy lie in the ideas that emerge in connection with Wittgenstein’s early commitment to the autonomy of language; these ideas are not abandoned or rejected in the later philosophy, but re-emerge, purged of the myths that govern Wittgenstein’s early thought.

9. In ‘Notes on Logic’, Wittgenstein writes: ‘In philosophy there are no deductions, *it* is purely descriptive’ (NL, p.106). Wittgenstein’s sense of a profound distinction between philosophy and scientific theorizing might be regarded as the fundamental starting point for his philosophical reflections. However, this guiding intuition clearly leaves a great deal undetermined. What is the purpose of a purely descriptive philosophy? And how is the task of description to be approached? In the same section of ‘Notes on Logic’, in a sentence that survives virtually unchanged in the *Tractatus*, Wittgenstein indicates at least one of the purposes of description as follows: ‘A correct explanation of the logical propositions must give them a unique position as

¹⁰ In a conversation with Waismann in December 1931, Wittgenstein remarks: ‘In my book I still proceeded dogmatically. Such a procedure is legitimate only if it is a matter of capturing the features of the physiognomy, as it were, of what is only just discernible—and that is my excuse. I saw something from far away and in a very indefinite manner, and I wanted to elicit from it as much as possible’ (WVC, p.184).

¹¹ Rhees makes the point as follows: ‘The question “*How* is the picture connected with the fact it pictures?” can only mean: “How does it have the role of a picture at all?”’ (Rhees, 1966/1970, p.40).

¹² Winch also emphasizes that in the *Tractatus* language, or syntax, is ‘autonomous’. He writes: ‘What is not arbitrary in our notation is said . . . to depend on the essence of the *notation* (that is, on something linguistic). It is not said to be determined by the nature of any “extralinguistic objects”. What is being said is that if we arbitrarily determine that a certain perceptible sign is to play a certain role, we do so *within the framework of language*’ (Winch, 1987, p.12).

against all other propositions' (NL, p.107; cf. *TLP* 6.112). The use of the word 'explanation' ('*Erklärung*') here should not be taken to contradict the claim that philosophy is 'purely descriptive'. Insofar as the idea of 'correct explanation' is to be understood as a call to make the distinction between the propositions of logic and other propositions perspicuous or manifest, it is, as we shall see, something that might be achieved by description alone and need not involve anything 'hypothetical'. The remark is, nevertheless, revealing as to the nature of Wittgenstein's early conception of his philosophical task of clarification. For it shows that Wittgenstein is working with a preconceived idea of the logical structure of our language, which is expressed in the idea of 'the logical propositions', whose unique status must somehow be made apparent. It is clear that Wittgenstein himself does not consider where this idea of the logical structure of our language comes from, but that he allows it to determine how he conceives the purpose of his purely descriptive investigation of language and to dictate, at least in part, his approach to his task of clarification.

The idea that his early investigation of language is shaped by preconceptions of which he is unaware is, of course, an important theme of Wittgenstein's own later criticisms of his early work. In a remark in the *Investigations* that begins by endorsing his early view of philosophy as purely descriptive—'It was true to say that our considerations could not be scientific ones'—Wittgenstein ends by acknowledging that this task of description is much more difficult, the obstacles to it much greater, than we think:

These are, of course, not empirical problems; 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)

It seems fair to assume that when Wittgenstein speaks here of 'an urge to misunderstand' the workings of our language, he is thinking of, among others, his own earlier self. The remark suggests that he sees his earlier self as having set out simply to describe the workings of our language, but as having been prevented from seeing what is there to be seen. Although he set out to look, not think, he now recognizes that he was subject to preconceptions or influences that frustrated his purely descriptive intentions. I suggested earlier that the idea of meaning as something that is correlated with a word is one source of such preconceptions. The idea that sense must be determinate and the idea that logic constitutes the essence of representation are, as we'll now see, another.

Wittgenstein's conviction that philosophy is purely descriptive, that we have only to look and see how language functions, is central to his conception of the investigation that he undertakes in the *Tractatus*. However, it is also the case that Wittgenstein's early philosophy is dominated by a particular set of problems that together express a preconceived idea of the nature of language. The problems include the nature and status of the propositions of logic, the nature of truth and falsity, the nature of negation, and of the logical constants generally, and the nature of inference. Wittgenstein is, moreover, convinced that, at bottom, each of these problems is an aspect of what he calls in the *Notebooks* 'a single great problem':

The problem of negation, of disjunction, of true and false, are only reflections of the one great problem in the variously placed great and small mirrors of philosophy. (*NB*, p.40)

He instructs himself not to try to treat each of these problems piecemeal:

Don't get involved in partial problems, but always take flight to where there is a free view over the whole *single* great problem, even if this view is still not a clear one. (*NB*, p.23)

And he identifies this 'single great problem' as follows:

My whole task consists in explaining the nature of the proposition. (*NB*, p.39)

Thus, Wittgenstein is convinced that we shall see everything clearly—the nature and status of the propositions of logic, negation, disjunction, inference, truth and falsity—when we see this one thing clearly: the nature of a proposition.¹³ It is not that we shall be able to *deduce*, say, the status of the propositions of logic, or the nature of negation, from the nature of the proposition; 'in philosophy there are no deductions'. It is rather that coming to see the nature of the proposition clearly *is, at the very same time*, coming to see negation and the status of the propositions of logic clearly: we have here, not a number of separate problems, but one great problem. If the problem is to be solved, then it must be solved all at once and in its entirety. The idea of the single great problem is that once the nature of a proposition has become

¹³ The significance of the idea of a 'single great problem' is discussed by McGuinness in McGuinness, 1974. Ricketts also recognizes the significance of this idea: '[Wittgenstein's] leading idea is that a proper understanding of the relation of sentences to reality that makes them correct or incorrect models of reality will encompass a proper understanding of the logical relationships among sentences, above all the relationship of logical consequence' (Ricketts, 2002, p.227).

clear, then everything will be clear: the nature and status of the propositions of logic, the nature of negation, of inference, and so on. Although the expression ‘single great problem’ does not occur in the *Tractatus*, the idea that the problems he is dealing with must be dealt with all at once and in their entirety is clearly expressed in a number of places:

The solutions of the problems of logic must be simple, since they set the standards of simplicity.

Men have always had a presentiment that there must be a realm in which the answers to questions are systematically combined—a priori—to form a self-contained system.

A realm subject to law: Simplex sigillum veri [Simplicity is the hallmark of truth]. (TLP 5.4541)

All the propositions of our everyday language, just as they stand, are in perfect logical order.—That utterly simple thing, which we have to formulate here, is not a likeness to the truth, but the truth itself in its entirety. (TLP 5.5563)

Thus, the idea that each aspect of the single great problem calls for complete clarity, by which all the problems will be seen to disappear, is closely connected with Wittgenstein’s early conviction that there must be a logical order, not only in our language, but in any system of representation in which the world is represented. Wittgenstein’s early conception of his task of clarification is thoroughly coloured by this conviction that there is a logical essence of all representation, which can be made clear through an investigation of the nature of a proposition. He conceives the task of the *Tractatus* to be one of revealing the logical order—the essence of representation—in virtue of which language is used to express thoughts that are true or false. The task of making perspicuous the nature of a proposition, the nature and status of the propositions of logic, of negation, and so on is seen to be identical with this task of making the logical order—i.e. the essence—of our language clear.

10. Diamond and Conant’s emphasis on the rejection of general philosophical insights concerning the nature of language, and on the piecemeal nature of Wittgenstein’s early approach to what he sees as philosophical illusion, have led them to a particular understanding of Wittgenstein’s talk of ‘the clarification of propositions’ (TLP 4.112). On their view, he is to be understood as describing how a post-Tractarian philosophy, which eschews metaphysical questions, might be pursued. The *Tractatus* itself is a contribution to this task *only* to the extent that it shows specific examples of philosophical claims—e.g. ‘The world is the totality of facts not things’—to be nonsense.

This is to be achieved, as we saw earlier, not by reference to any theory of sense or nonsense, but by means of the reader's gradual realization that he cannot give a sense to these words as they are combined in this sentence. However, if we accept that Wittgenstein's commitment to a conception of philosophy as purely descriptive is compatible with a concern to clarify the nature or essence of a proposition, then a different reading of *TLP* 4.112 is invited. We might take it as referring, not only to the future analyses of particular propositions, but also to the (a priori) task of making clear how any proposition—or, indeed, any representation of the world—expresses its sense, which, on this view of Wittgenstein's project, is the central task of the work itself.

On this alternative reading, a central part of the 'logical clarification of thoughts' that Wittgenstein speaks of is a matter of seeing clearly into the essential logical structure of any language, or system of representation, in which thoughts are expressed. Thus, Wittgenstein's conception of a philosophical work as consisting 'entirely of elucidations' is not to be understood purely as the expression of a conception of a future philosophy that is concerned with the piecemeal analysis of individual utterances. It is rather that the understanding of the nature of a proposition, which is the central concern of the *Tractatus*, is one that Wittgenstein believes will be achieved by means of clarification and description, and does not depend upon any hypothetical claim about the relation between language and a transcendent world. It is a matter of elucidating what is essential and what is arbitrary in any language in which thoughts that are true or false are expressed, of our coming to see clearly how one proposition occurs in another, of our recognizing how one proposition can be inferred from another, and so on. All of this is to be achieved simply by our examining language and making clear what language itself reveals about its workings. On this view, the *Tractatus* is neither merely an exemplar nor a prolegomenon to the activity of philosophical clarification. Rather, it is a work in which the nature of a proposition, which is already clear even though we do not see it clearly, is allowed to make itself clear to us. However, it is also the case that Wittgenstein's conception of what it is that needs to be made clear is itself completely determined by his unexamined commitment to a particular conception of a proposition and to the idea that where there is sense—where there are representations that are true or false—there too there must be perfect logical order, that is, to a conception of language as an exact calculus operated according to precise rules.

In a letter to C.K.Ogden, Wittgenstein proposed that the final sentence of *TLP* 4.112 be translated as follows: 'the propositions now have become

clear that they ARE clear.’ This is undoubtedly tortuous grammar and it is not easy to see what Wittgenstein intended to capture by it. However, it seems to suggest that Wittgenstein believes that the *Tractatus* itself succeeds in making propositions clear: it makes clear how propositions express their sense clearly. This in turn suggests that it is correct to see the *Tractatus* as undertaking a task of clarification, which Wittgenstein takes to depend upon our achieving ‘a free view over the whole single great problem’. Once the nature of a proposition has been allowed to make itself clear—once we see clearly how a proposition expresses its sense—then everything (how one proposition occurs in another, how one proposition can be inferred from another, the status of the propositions of logic) will have become clear and there will be nothing left to explain. If this is correct, then we can understand why Wittgenstein sees the activity of logical clarification of the nature of a proposition as essentially connected with the task of setting the limits to the expression of thought. It is not that Wittgenstein puts forward a theory of meaning from which the boundaries of what can be said may be deduced a priori. Rather, the logical clarification of the nature of a proposition is a process by which everything that is essential to our expressing a thought becomes clear. By the same stroke, we come to understand that, in some circumstances, the right question might not be one of the truth or falsity of what has been said, but whether a thought has been expressed. The importance of the insight into the essence of representation is, not that it will enable us to legislate concerning the boundary between sense and nonsense, but that it makes clear both the possibility and the importance of a certain sort of critical attitude towards the words we utter. It is not that Wittgenstein can tell us in advance whether words, as they are uttered on a particular occasion, do or do not express a thought, but that he wants us to come to recognize that, if our words express a thought, then we can make that thought clear. To understand the essence of a proposition is to understand what is involved in making a thought clear, and also to understand that where no clear thought has been expressed, nothing has been expressed: our words are simply nonsense.

This understanding of Wittgenstein’s attitude towards the task of setting the limits to the expression of thought is in broad sympathy with the rigorously anti-theoretical approach of Diamond and Conant. However, as we saw earlier, Diamond sees it as a weakness of Wittgenstein’s early work that he conceives the task of showing, in any particular case, that someone who says something metaphysical ‘has failed to give a meaning to certain signs in his proposition’ (*TLP* 6.53), within the framework of an implicit picture of

what a successful analysis must reveal. For Diamond, this shows that the sort of philosophy of language that Wittgenstein set out to undermine has not been fully overcome. The correct method of philosophy, as it is described in *TLP* 6.53, directs our attention away from a concern with attempting to settle traditional philosophical disputes, and towards showing that the metaphysician's words, in terms of which the dispute is expressed, have no application: we can do nothing with them. The claim is that Wittgenstein's conception of this critical task is dogmatically constrained by a particular idea of what constitutes a successful analysis of a proposition with sense, which ultimately derives from the problematic form of philosophy of language that the methodological principle expressed in *TLP* 6.53 was meant to liberate us from. On Diamond's view, the methodological principle put forward in *TLP* 6.53 emerges when we finally reject the form of philosophy of language that she believes is Wittgenstein's main target, but the influence of the old way of thinking is still to be seen in his conception of how the future work of clarification is to be pursued.

By contrast, I want to see the methodological principle of *TLP* 6.53 as simply another way of expressing the insight into the autonomy of language and the essence of a proposition that it has been the central work of the *Tractatus* to achieve. What we now see is that the correct response to the metaphysician's attempt to get outside language, or to ground language in a reality outside it, is one that is made within language. In coming to see the essence of a proposition clearly, we also come to see that the only possible form of criticism of the metaphysician's utterances—i.e. the only criticism that does not simply contradict the metaphysician's claim and thereby fall into the same trap—is one that sets out to show that no clear thought has been expressed by the words he utters, that so far nothing has been said. This methodological principle might be seen as one important expression of the insights into the workings of language that Wittgenstein achieves. That Wittgenstein's understanding of how the methodological principle is to be applied shares the dogmatism that governs his preconceived idea of the object of his logical investigation is, on this reading, exactly what we should expect.

Thus, on the interpretation to be developed here, Wittgenstein is taken to hold that the work of clarifying the nature of a proposition, which he believes to be the fundamental task of philosophy, is achieved by means of an investigation that is internal to language. It is this work of clarifying the nature of a proposition, which is achieved by the remarks that make up the *Tractatus* itself, that ultimately brings about the vital shift in our understanding of the

nature of philosophical problems—and how to deal with them—that is the climax of the work. It is essential to this anti-metaphysical interpretation of the work that we find a way of reading the remarks of the *Tractatus* on which the claim that they have a purely clarificatory or descriptive status becomes plausible. This requires, among others things, that we show that the initial impression that Wittgenstein begins the work with a statement of his fundamental ontology, which then forms the basis of his conception of the relation between language and the world, is an illusion.

Diamond and Conant take these opening remarks to be an ironic expression of a philosophical perspective on the relation between language and the world; they are intended to exemplify the sort of philosophy of language that, on their reading, Wittgenstein is out to undermine. Thus, the aim of Wittgenstein's work as a whole is ultimately to show that these remarks are plain nonsense and that the possibility of the perspective they purport to adopt is an illusion. The interpretation to be developed here will argue, by contrast, that the kind of reassessment that Wittgenstein ultimately intends us to make concerning the opening remarks is one on which we recognize that they do not have the metaphysical status we initially suppose. What we eventually come to see is that what Wittgenstein is doing in these remarks is nothing more than tracing the logical order that he has shown to be essential to language's representing states of affairs, or expressing propositions with sense, in the way that it does. Thus, the opening remarks are ultimately recognized as being simply descriptive of the logical order that is essential to our system for representing how things are in reality. As we shall see, what makes these remarks problematic is not that they ultimately purport to say something about the connection between language and an independent reality, but that the view of the logical order of language that they express embodies both the primitive idea that the meaning of a word is something that is correlated with it and an idealized picture of language as an exact calculus operated according to precise rules.

Diamond and Conant's resolute reading of Wittgenstein's early work places all the stress on the idea of exposing particular philosophical claims as nonsense. The approach that I want to develop, and which broadly follows the anti-metaphysical approach that is taken by Rhees, Winch, Ishiguro, and McGuinness, understands Wittgenstein's anti-theoretical conception of philosophy rather differently. The force of the claim that philosophy is 'purely descriptive' is to be understood, in part at least, as a call to allow language itself to reveal how it functions, that is, to reveal its nature. The aim is to

make perspicuous how logic (language) ‘takes care of itself’. Wittgenstein’s belief that his task is purely one of description arises from his conviction that ‘I cannot need to worry about language’ (*NB*, p.43): everything that is essential to how a proposition expresses its sense must be manifest in the way language functions. Thus, Wittgenstein’s aim is not to give a *theory* that explains how a proposition represents reality; that is to say, ‘there must not be anything hypothetical in [his] considerations’ (*PI* 109). Insofar as ‘[t]he way language signifies is mirrored in its use’ (*NB*, p.82), the task is purely one of clarification: we have only to look at the use of language in order to see how it signifies, that is, how it represents possible states of affairs, in the way that it does. It is simply by attending carefully to what is there before our eyes, Wittgenstein believes, that we shall clarify the nature of a proposition. The idea of the single great problem is that once the nature of a proposition is clear, then everything will be clear: the nature and status of the propositions of logic, the nature of negation, of inference, and so on. Wittgenstein’s idea that philosophy is ‘purely descriptive’ amounts to the conviction that coming to see the nature of a proposition clearly is to be achieved ‘not by giving new information, but by arranging what we have always known’ (*PI* 109). The nature of a proposition must be something that language itself makes clear. However, as I suggested just now, Wittgenstein’s whole conception of this central task of clarification is governed by a preconceived idea of logic and the essence of a proposition.

11. In the *Philosophical Investigations*, Wittgenstein spends some time articulating what he later saw as the series of illusions that make up the framework of his early investigation into the workings of our language. In *PI* 133, he writes: ‘Problems are solved (difficulties eliminated), not a single problem.’ Like Diamond, I want to read this remark as bearing directly on Wittgenstein’s own early work. The remark comes at the end of a long series of remarks in which Wittgenstein is principally concerned with giving a detailed diagnosis of a whole syndrome of illusions to which he believes he was subject in the *Tractatus*. He characterizes his fundamental misconception as follows:

We are under the illusion that what is peculiar, profound, essential in our investigation, resides in its trying to grasp the incomparable essence of language. (*PI* 97)

The early Wittgenstein’s idea, which we saw him express in the *Notebooks*, that he is confronting ‘a single great problem’ can be seen as one expression of this conception of the ‘incomparable essence of language’ which must be grasped in its entirety.

The idea that all the problems he confronts—the nature and status of the propositions of logic, the nature of negation, of inference, of truth and falsity—are aspects of a single problem is equivalent to the idea that by making the essence of a proposition clear, everything will become clear: to clarify the essence of a proposition is to clarify the essence of language. In the *Investigations*, he recognizes that this idea of the essence of language, or of a proposition, is itself essentially connected with the idea of a logical order that constitutes the essence of all representation. He sees that what he now describes as a conception of the proposition as ‘something remarkable’ or ‘something unique’ contains ‘the germ [of] the subliming of our whole account of logic’ (*PI* 94), that is, of the tendency to suppose that there must be a logical order which is ‘the basis of everything empirical’ (*PI* 89), and that is essential to all description or representation of states of affairs. Revealing the essence of language—the essence of representation as such—now becomes equivalent to uncovering the logical order that is essential to any system of representation in which thoughts are expressed. We become ‘dazzled by the ideal’ (*PI* 100) and are no longer able to recognize its status: ‘One thinks that one is tracing the outline of the thing’s nature over and over again, and one is merely tracing round the frame through which we look at it’ (*PI* 114). The question Wittgenstein is interested in, in the *Investigations*, is where this idea comes from in the first place. How are we led to the idealized conception of a proposition and its essence—logic—that forms the framework to Wittgenstein’s early thought?

The idea of a proposition as something unique arises, Wittgenstein suggests, in ‘the forms that we use in expressing ourselves about propositions’ (*PI* 93). Our way of talking about propositions ‘seduces us into thinking that something extraordinary, something unique, must be achieved by [them]’ (*PI* 93). He goes on: ‘a *misunderstanding* makes it look as if a proposition *did* something queer’ (*PI* 93). Wittgenstein characterizes this ‘misunderstanding’ as the ‘tendency to assume a pure intermediary between the propositional *signs* and the facts’ (*PI* 94). This ‘pure intermediary’ is the proposition that the propositional sign expresses, which is to be made clear through a process of analysis. The problem is not that we are here introducing an abstract entity, but that we are thinking of the proposition as a complete and exact representation of a unique or absolutely determinate possible situation or state of affairs. Thus, we have introduced the idea that at the end of analysis we shall arrive at propositional signs that are essentially or uniquely correlated with a state of affairs that either exists or fails to exist. The proposition is conceived as a unique, determinate representation of a particular possible state of affairs, a representation *as*

such. Wittgenstein himself uses this expression in the *Notebooks*: ‘However, all we want is to investigate the principles of representing *as such*’ (*NB*, p.23).

It is this way of talking about propositions, Wittgenstein suggests, that makes a proposition appear to be something remarkable:

“Thought must be something unique.” When we say, and *mean*, that such-and-such is the case, we—and our meaning—do not stop anywhere short of the fact; but we mean: *this-is-so*. But this paradox (which has the form of a truism) can also be expressed this way: *Thought* can be of what is *not* the case. (*PI* 95)

A proposition is essentially connected with a completely determinate state of affairs that either exists or does not exist. We find Wittgenstein himself giving expression to this sense of wonder at a proposition in the *Notebooks*:

A picture can present relations that do not exist! How is that possible? (*NB*, p.8)

The difficulty of my theory of portrayal was that of finding a connexion between the signs on paper and a situation outside in the world. (*NB*, p.19)

. . . what is really characteristic of the relation of representing? (*NB*, p.21)

How does the picture present a situation? It is after all itself not the situation, which need not be the case at all. (*NB*, p.25)

That shadow which the picture as it were casts upon the world: How am I to get an exact grasp of it? Here is a deep mystery. It is the mystery of negation: This is not how things are, and yet we can say *how* things are *not*. (*NB*, p.30)

A proposition’s power to express or mean the specific state of affairs it does is independent of the state of affairs’ existing. The proposition, all by itself as it were, independently of what is the case, describes or represents a unique situation that can either exist or fail to exist: ‘Thought, language, now appear to us as the unique correlate, picture, of the world’ (*PI* 96). This way of talking invites the question: *How* does a proposition do that? How does a proposition achieve this extraordinary feat? How does it represent a particular state of affairs that can either exist or not exist? How is it that when we say and mean a proposition ‘we mean: *this-is-so*’? In the *Tractatus*, Wittgenstein is convinced that we have only to look at a proposition—i.e. at language as it is used to say how things are—to see how it represents: ‘The way in which language signifies is mirrored in its use’ (*NB*, p.82). However, his whole conception of what it is that he is setting out to clarify is determined by this picture of a proposition as a complete and exact representation—a unique picture or correlate—of a particular possible state of affairs. It is this preconception of the proposition as a complete and exact representation of a determinate state of

affairs that prevents Wittgenstein from being able ‘simply to look and see how propositions really work’ (PI 93). He believes that understanding the nature of a proposition will not involve any hypothetical consideration, but he begins what he conceives to be a task of clarification with the idea of a proposition ‘as a unique correlate, picture, of the world’ already in place. His conception of clarification, his idea of what is involved in ‘looking into the workings of language’, is now entirely determined by this preconceived idea of a proposition as a complete and exact representation of a possible state of affairs. Thus, he conceives his task to be one of revealing, by means of a process of clarification, everything that is essential to a propositional sign that is the unique correlate of a possible state of affairs, that is, of making clear the nature or essence of a proposition conceived as ‘a pure intermediary between the propositional signs and the facts’, as a complete and exact expression of what must be the case in order for the sentence I utter to be true.

Wittgenstein believes that the idea of the proposition as a unique or exact representation of a possible state of affairs is connected with a number of others. Thus, the idealized conception of a proposition goes along with the idea of logic as the essence of representation: logic is everything that is essential to a proposition’s representation of a state of affairs. Logic is conceived as presenting ‘the a priori order of the world: that is, the order of *possibilities*, which must be in common to both world and thought’ (PI 97). Logic, the essence of all representation, must be given as soon as we are given a system of representation in which we express thoughts that are true or false: if there is representation of reality, then the whole of logic is in place. Thus, logic must be ‘utterly simple’ or complete. It must be prior to truth and falsity: ‘no empirical cloudiness or uncertainty can be allowed to affect it’ (PI 97). Moreover, if logic is everything that is essential to representation, then representation is essentially in good logical order: a proposition’s place in logical space—its logical relation to other propositions—must be absolutely clear and determinate. Thus, the idea that ‘where there is sense there must be perfect logical order’ (PI 98) brings us back once again to the idea that what is expressed by our sentences must be something that is completely determinate, that can be made completely clear through analysis. Thus, ‘[t]he proposition and the word that logic deals with are supposed to be something pure and clear-cut’ (PI 105). The idea of the proposition as something unique is essentially connected with the idea that it must be possible to analyse the propositions of ordinary language in a way that reveals their sense with complete exactness. Thus, the idea of a pure, a priori essence of representation is essentially connected with the idea

that the logical order that is essential to language's ability to represent states of affairs, in the way that it does, is something that 'lies *beneath* the surface' (PI 92) of ordinary language, something which must be brought to light by means of a process of analysis, in which the proposition expressed by a propositional sign is made clear through a perspicuous expression of its sense.

It is not necessary, for the purposes of logic—i.e. for the purposes of clarifying the nature of a proposition and, thereby, the nature and status of the propositions of logic—that this analysis of the propositions of ordinary language should actually be carried out. However, it is essential to Wittgenstein's early, idealized conception of logic and a proposition that this analysis is possible. 'We become', Wittgenstein suggests, 'dissatisfied with what are ordinarily called "propositions", "words", "signs"' (PI 105); '[t]he idea now absorbs us, that the ideal "*must*" be found in reality' (PI 101). We are now 'unable simply to look and see how propositions really work'; we are prevented by our preconceived idea of a proposition as a complete and exact expression of the truth-conditions of the sentences that I utter—as 'a pure intermediary between the propositional *signs* and the facts'—and of the logical order that constitutes the essence of a proposition conceived as a complete and exact representation. The ostensible object of investigation—ordinary language—slips from view and our logical investigation is directed towards the idealized image of a proposition as a complete, logically determinate, representation of reality. The conception of essence that is embedded in our preconceived idea of a proposition is now projected onto ordinary language: the ideal 'must be found in reality, for we think we already see it there' (PI 101).

Thus, we come to believe that 'there must be perfect logical order even in the vaguest sentence' (PI 98). We attribute to our ordinary propositions all the properties of the ideal that we've constructed: 'We predicate of the thing what lies in the method of representing it' (PI 104). Thus, it comes 'to look as if there were something like a final analysis of our forms of language, and so a *single* completely resolved form of every expression' (PI 91). This idea of a complete analysis of ordinary propositions is connected, in turn, with the idea of ultimate indefinables that are the end point of analysis. In combination with the naive conception of meaning as something that is correlated with a word, and with a commitment to the autonomy of language, this leads in turn to the conviction that '*a name ought really to signify a simple*' (PI 39). Thus, the general outlines of some of the central elements in Wittgenstein's early attempt to achieve an overview of his single great problem—the problem of the nature of a proposition—are presented in the *Investigations* as aspects of a

single grand illusion, a preconceived idea of the essence of language, one that has its origins in our ways of talking about propositions.

12. In setting out his descriptive agenda for philosophy, it is clear that the early Wittgenstein believed that he had only to look into the workings of language in order to see there how language functions. A hypothesis cannot be to the point, insofar as it would make language's ability to represent a matter of conjecture and subject to doubt. As Wittgenstein says in the *Notebooks*, 'I cannot need to worry about language' (*NB*, p.43). Language itself must make clear how it represents, that is, what its essence consists in: 'We must recognize *how* language takes care of itself' (*NB*, p.43). However, as we've just seen, the early Wittgenstein is himself in the grip of a preconceived idea of the nature of a proposition that makes it impossible for him to see, or better attend to, what is there before his eyes. The idea of a proposition as a unique representation of a state of affairs, and of the perfect logical order that must lie beneath the surface of ordinary language, determines the way Wittgenstein conceives his problem and, with it, his whole approach to the task of clarification. His gradual liberation from this preconceived idea of language as an exact calculus operated according to precise rules should not be understood as a theoretical development, but as a matter of his shaking off the illusions that our ways of talking about meaning and propositions invite, and of his turning his attention to the concrete phenomena of our life with language. Once the turn towards our actual, concrete practice of employing expressions is accomplished, Wittgenstein's whole approach to the task of clarifying how our language functions undergoes a profound change. However, as I already remarked, I want to argue that underlying the changes that divide the early and the later philosophy, there is a fundamental continuity that permits us to see the latter as, in an important sense, a development of what has gone before.

On this interpretation, Wittgenstein is, from the very beginning, convinced that the task of 'trying to understand the essence of language—its function, its structure' (*PI* 92), is one that is independent of anything hypothetical: language itself makes clear how it signifies. Everything essential to language is internal to it and can be made clear by means of description alone. What he comes to realize, however, is the difficulty of carrying out this task of clarification or description free of prejudices and preconceived ideas. There are certain natural ways of thinking about language, which language itself invites, which are the source of misconceptions and misunderstandings that 'surround the working of language with a haze that makes clear vision impossible' (*PI* 5).

In his early work he falls victim to a number of these misconceptions; he is in the grip of a preconceived idea of language and the essence of representation, and tempted by the picture of meaning as something that is correlated with a word. The difficulty in resisting these philosophical pictures is, he comes to see, less an intellectual one than a problem of the will. What he finds is that the more he attends to the detail of our actual use of expressions, the more he is forced to acknowledge that the idea of complete exactness, of perfect logical order, and of 'the incomparable essence of language' (*PI* 97) are illusions: 'The more narrowly we examine actual language, the sharper becomes the conflict between it and our requirement. (For the crystalline purity of logic was, of course, not a *result of investigation*; it was a requirement' (*PI* 107).

However, even once the illusions are abandoned, the question of how language signifies, and of the nature and status of logic, still remain. These questions are ones that Wittgenstein still believes will be answered by means of clarification alone, but now the work of clarification is to be undertaken in respect of our actual practice of using language, and in what Diamond calls 'a realistic spirit'. In a certain sense, it is the immediate object of his investigation that changes: his investigation is no longer directed at the idea of an exact calculus that underlies our use of language, but to our actual employment of language within our everyday lives. It is this change in the object of investigation that calls for a completely different approach to the one that Wittgenstein takes in the *Tractatus*. However, beneath the surface of the important and striking differences in approach, there remains, I will argue, a fundamental continuity of philosophical purpose and insight; it would, I want to claim, be almost correct to say that the *Philosophical Investigations* is a re-imagining of the most important philosophical ideas of Wittgenstein's early work, one which is purged of the illusions to which the early Wittgenstein was subject.

2

Wittgenstein's Critique of Frege and Russell 1: Propositions with Sense

1. The significance of the work of Frege and Russell for Wittgenstein's early thought is not a matter for dispute. The nature and extent of the impact of each of these thinkers on Wittgenstein's ideas is, however, more contentious. Geach and Anscombe¹ were the first to argue that the *Tractatus* could not be understood independently of the work of Frege. Diamond, Conant, and Ricketts² have further developed the case for reading the *Tractatus* as both profoundly influenced by Frege's philosophical logic, and as an attempt to resolve what Wittgenstein saw as deep tensions within it. Others have argued that the pendulum has now swung too far and that there is a danger of overestimating the degree to which Wittgenstein's ideas arise out of an engagement with Frege's work. For example, Warren Goldfarb³ has argued not only that Wittgenstein was much more deeply steeped in the work of Russell, but that his understanding of Frege was relatively superficial and frequently coloured by Russellian ideas. Thus, he argues that even when Wittgenstein arrives at ideas that have echoes in the work of Frege, he should be seen as arriving at them independently of Frege's influence. Ian Proops⁴ has also claimed that the tendency to read the *Tractatus* as an attempt to develop a broadly Fregean philosophy of logic 'is more likely to distort our understanding of the *Tractatus* than to enhance it' (Proops, 2000, p.30). Proops, like Goldfarb, believes that it is 'Russell whose work provides the most important background for understanding what Wittgenstein is doing in the *Tractatus*' (Proops, 2000, p.xviii).

In the face of this controversy, two things, at least, are clear. First of all, that Wittgenstein's sense of the problems that he confronts in his early work arises out of his reading of Frege and Russell; and secondly, that both his sense of

¹ See Anscombe, Introduction to 1971; Geach, 1976.

² See Diamond, 1984 and 1988; Conant, 1991 and 2002; Ricketts, 1985 and 2002.

³ See Goldfarb, 2002.

⁴ See Proops, 1997 and 2000.

what the problems are and his way of responding to them are highly distinctive. It might be argued that there is a danger of missing exactly what is most original in Wittgenstein's early thought, if we approach the task of interpreting Wittgenstein's ideas from a perspective in which the question of influence is central. The obscurity of Wittgenstein's text makes the danger even greater than it might otherwise be, for there is a temptation to use what is familiar from the thought of his contemporaries as a guide to Wittgenstein's views. Yet there is good reason to believe that the *Tractatus* is Wittgenstein's attempt to pursue the question about the nature of a proposition and the status of logic in a way that he believes to be both innovative and distinct from the approaches of Frege and Russell. Even though Wittgenstein is explicitly in dialogue with Frege and Russell, it is clear that his philosophical concerns, his aims, and his method are all very different from theirs, and he is able to ignore many of the technical demands that are central to their work. It seems that if we are to understand Wittgenstein's early thought, it is essential that we recognize how he himself conceives of the problems that he detects in the work of Frege and Russell, and how he approaches the task of overcoming them.⁵ As Russell says in his 'Introduction', 'in order to understand Mr Wittgenstein's book, it is necessary to realize what is the problem with which he is concerned' (*TLP* p.ix). For this reason, I want to put aside the important issue of positive influence, and also the question of how Frege or Russell might have responded to Wittgenstein's criticisms of their work. The question I am concerned with is how Wittgenstein himself perceives the philosophical context in which he develops the ideas of the *Tractatus*. The main purpose of this chapter and the one following is to make clear, from Wittgenstein's own perspective, what the problems are that he sets out to make completely disappear. The aim is to begin the work of interpretation by presenting Wittgenstein's own highly characteristic conception of what is problematic or confused in what he sees as the available understanding of the nature of a proposition and the status of the propositions of logic.

⁵ This is not to suggest that those who are concerned with the question of influence are not also concerned with this question of understanding how Wittgenstein himself conceives the problems he is out to overcome. Goldfarb, for example, writes: 'It is probably uncontroversial to say that one important strategy for gaining more insight into the *Tractatus* is to figure out what was moving its author: what he thought the problems were, what wanted explanation that his predecessors Frege and Russell did not correctly explain or even try to explain.' Goldfarb also recognizes the dangers of prioritizing the issue of influence: 'The problem, as I see it, then, is that ascribing the kind of influence to Frege that Geach, Diamond and Ricketts do may constrain our perspective on the explanatory agenda that Wittgenstein is working with' (Goldfarb, 2002, p.187).

2. The major sources for understanding Wittgenstein's sense of the problems he confronts are provided by the surviving notes that Wittgenstein made prior to his preparation of the text of the *Tractatus*: 'Notes on Logic: 1913'; 'Notes Dictated to G.E. Moore in Norway: April 1914'; and *Notebooks, 1914–1916*. It's here, and especially in the first of these, that we find Wittgenstein pinpointing what he takes to be deficient in the philosophical logic of Frege and Russell. There is, in these preparatory notes, already a clearly developed sense that these problems arise from a lack of clarity concerning the way language functions, that is, from a failure to observe what the use of language itself makes manifest. After 'Notes on Logic', Wittgenstein's critical remarks are woven in with attempts to clarify essential logical distinctions in how expressions function, and to allow the real nature of logic and a proposition to reveal itself. It is possible to trace in these remarks the development of most of the central ideas of the *Tractatus*: the idea of propositions as models of reality, the idea of logical portrayal, the idea of internal relations, the distinction between saying and showing, between what is essential and what is arbitrary in a symbol, between names and relational expressions, between functions and operators, between general propositions and the propositions of logic, and so on. What is clear, however, is that all of these ideas arise out of, and are motivated by, Wittgenstein's original way of conceiving what he believes are the fundamental failures of Frege's and Russell's understanding of logic and the nature of a proposition.

Wittgenstein's principal concern is to come to see clearly logical distinctions that he believes Frege and Russell obscure or blur over, thereby generating the puzzles and problems that prompt his philosophical investigation. It may seem puzzling, therefore, that Wittgenstein, as Frege observes in a letter responding to the *Tractatus*, spends so little time stating or diagnosing the problems that moved him, in the final published version of his remarks.⁶ Certainly the work does not begin with a statement of what these problems are and many of the references that do occur, to what Wittgenstein sees as the confusions of Frege and Russell, are made only in parentheses. Moreover, he rarely does more than simply state what he takes the confusion to be and does

⁶ Frege writes: 'After one has read your preface, one does not really know what one is to do with your first proposition. One expects to see a question posed, a problem, and then one reads assertions that are made without substantiations, yet where they are urgently needed. How do you arrive at these assertions? With what problems are they connected? At the beginning I would like to see a question posed, a riddle whose solution I could enjoy getting to know. . . . To me it lacks a proper introduction in which a goal is set' (letter to Wittgenstein 30.09.1919).

not, on the whole, explore the problems to which he believes the confusion gives rise. All of this becomes less puzzling, however, if we recall that Wittgenstein does not take himself to be solving genuine problems or to have replaced a false account of the nature of logic and the proposition with a true one. Rather, he believes that he is simply eliminating confusions by means of a process of clarification of the logical order that is manifest in language. From the perspective of Wittgenstein's conception of the problems with which he is concerned, all he needs to do is to present clearly what language itself makes clear and none of the questions, which on the old understanding seem urgent, will arise. The problems that the work of Frege and Russell gives rise to are illusory: they arise entirely from an absence of the clarity concerning how language functions that the investigation undertaken in the *Tractatus* is intended to achieve. It will help us to understand the philosophical purpose of this investigation if we begin by understanding Wittgenstein's objections to the ideas that he finds in Frege and Russell.

3. In the previous chapter we saw that Wittgenstein, writing in the *Investigations*, expresses the belief that his early work is written from the perspective of someone who is in the grip of a number of related preconceptions regarding the nature of a proposition and of what he believed to be its essence: logic. These preconceptions are, to some extent at least, ones that Wittgenstein shares with Frege and Russell. Ricketts characterizes this shared framework as follows:

Wittgenstein . . . retain[s Frege's and Russell's] inchoate but guiding assumption first that logic frames all thought, and second that it is possible to give a clear, completely explicit and unambiguous expression to the contents judged true or false. (Ricketts, 1996, p.59)

The first of these guiding assumptions—the shared commitment to the conception of logic as the essential framework of all thought—has important consequences for the whole approach to questions of the nature and foundation of logic. On this conception there is no distinction between object-language and meta-language. Philosophical logic is understood to deal with concepts or notions that cannot be straightforwardly described or defined, insofar as a grasp of them is presupposed in our ability to use a language to express thoughts at all.⁷ In the same way, the so-called laws of logic are conceived as the essential

⁷ For a discussion of the contrast between Frege's conception of logic and the modern conception see Jean Van Heijenoort, 1967.

framework that governs all thought which aims at truth. This conception of logic as the essential framework to the employment of language in the expression of judgements is expressed in Wittgenstein's commitment to the idea of an essence of representation. The problems that Wittgenstein focuses on in 'Notes on Logic', and the response that he ultimately makes to them, must be understood as emerging within the context of his general commitment to a universal conception of logic, and to the idea of a perfect logical order that must lie behind our ordinary language. In approaching Wittgenstein's conception of these problems, it is also important to remember, as we saw in the previous chapter, that he is convinced that all the problems he identifies are somehow unified, or aspects of 'a single great problem'. He does not take himself to confront a series of unrelated problems, each one of which may be dealt with piecemeal, but with a single great problem that must be solved all at once and in its entirety. In what follows it is important that we achieve some sense of how Wittgenstein arrives at this idea of 'a single great problem', of why he believes that all the problems he confronts have a common source that entails that one problem will disappear only if they all do.

Although the problems are all ultimately to be seen as one, we can begin by dividing the problems with which Wittgenstein is concerned into two main groups: those that arise in connection with the nature and status of the propositions of logic and those that arise in connection with the nature of a proposition as such. Given Wittgenstein's anti-theoretical conception of philosophy, there is a question about how we should understand the dialectic of Wittgenstein's objections to Frege and Russell. Clearly, it would not be compatible with his fundamental conception of himself as engaged in a task of clarification to understand his objections to Russell and Frege as motivated by theoretical commitments. How else might we understand it? In the later philosophy, Wittgenstein famously describes himself as 'assembling reminders for a particular purpose' (*PI* 127). In the context of the later philosophy, we can understand the remark as pointing, for example, to his technique of asking us to recall how we use a given expression: when we would say that someone had understood a word, is playing chess, is expecting someone to tea, is pretending to be in pain, and so on. By means of these reminders he tries both to counter a false view of the grammar of our concepts and to achieve an overview of how a region of our language actually functions. There is clearly a difficulty in trying to read a similar dialectical structure into the early philosophy. Although ordinary language is the topic of Wittgenstein's early reflections, in the sense that he is concerned with the essence of all representation of

states of affairs, it is nevertheless almost entirely absent from his remarks as an object of investigation.

As we saw in the previous chapter, his later criticisms of his own early work accept that he failed to attend to how the words 'proposition', 'object', 'name', and so on, are used in our ordinary language-game (*PI* 116). However, the fact that Wittgenstein's early thought occurs within the framework of a set of preconceptions which he later regards as illusions should not be taken to preclude our understanding the problems he raises as grounded in a sense of a clash between a philosophical conception of how language functions and our inchoate grasp of the logical order of language that comes with linguistic mastery. The inchoate sense of order that Wittgenstein appeals to is thoroughly coloured by the preconceptions that frame his work as a whole. However, within the context of the idealized order that these preconceptions require, I want to read the early Wittgenstein as proceeding in a way that is generally associated with the later philosophy: he is assembling reminders of distinctions, or aspects of our use of language, which are elided or rendered problematic on Frege's and Russell's understanding of logic and the nature of a proposition. What he wants is that the logical order that he believes is essentially already there in our use of language should be made perspicuous; his criticisms of Frege and Russell are directed at showing that they have not succeeded in making this order clear.

4. Let's begin with the problems that arise in connection with the nature of a proposition as such. I've argued that the central aim of the *Tractatus* is to make the nature of a proposition perspicuous, that is, to make clear how a proposition expresses its sense. For Wittgenstein, to grasp the sense of a proposition is to grasp what it is for it to be true and, by the same stroke, what it is for it to be false: a proposition has sense insofar as it has true–false poles. This highly distinctive conception of sense is expressed by Wittgenstein as follows:

Every proposition is essentially true–false: to understand it, we must know both what must be the case if it is true, and what must be the case if it is false. Thus a proposition has two *poles*, corresponding to the case of its truth and the case of its falsehood. We call this the *sense* of a proposition. (NL, pp.98–9)

The sense of a proposition is determined by the two poles *true* and *false*. (NL, pp.101–2)

"[T]rue" and "false" are not accidental properties of a proposition, such that, when it has meaning, we can say it is also true or false: on the contrary, to have meaning *means* to be true or false: the being true or false actually constitutes the relation of the

proposition to reality, which we mean by saying that it has meaning (*Sinn*). (NDM, p.113)

Achieving clarity concerning the nature of a proposition is fundamentally a matter of coming to see clearly how a proposition is related equally to its true–false poles; the problem of understanding how a proposition expresses a sense is the problem of understanding how a proposition represents a situation that either exists or fails to exist.

Wittgenstein's conception of the nature of the problem he confronts arises, at least in part, through his critique of Russell's multiple relation theory of judgement. Russell first develops the theory in 1910, as a result of a growing dissatisfaction with the view of judgement that he had expressed in *The Principles of Mathematics* (1903). There he had treated judgement, whether true or false, as a relation between a mind that judges and a single complex object, which he calls a proposition. He conceived of propositions as objective, non-mental entities whose constituents are not linguistic expressions but the entities indicated by them, which he calls 'terms'. Among terms, Russell distinguishes *things* and *concepts*: 'the former are the terms indicated by proper names, the latter those indicated by all other words' (Russell, 1964, p.44). Things can only occur in propositions as subjects or terms, concepts can occur either as subjects or as verbs. When a concept occurs as verb in a proposition, then it plays a dual role as term and as that which 'embodies the unity of the proposition' (Russell, 1964, p.50), that is, as that which unites the other terms into an objective unity or complex. In 'On the Nature of Truth and Falsehood', Russell makes two principal objections to the conception of judgement as a binary relation 'to a single object' (Russell, 1910/1992, p.118), which he now labels, following Meinong, 'an Objective'. First of all, Russell now thinks it 'seems evident that the phrase "that so-and-so" has no complete meaning by itself, which would enable it to denote a definite object as (e.g.) the word "Socrates" does' (Russell, 1910/1992, p.119). Secondly, 'if we allow that all judgements have Objectives, we shall have to allow that there are Objectives which are false. Thus there will be in the world entities, not dependent upon the existence of judgements, which can be described as objective falsehoods' (Russell, 1910/1992, p.119). Russell not only finds this view 'almost incredible', but it also leaves the difference between truth and falsehood 'inexplicable'. We are forced to treat truth and falsehood as primitive properties of objective complexes; we cannot say what makes a given proposition true or false, but are 'compelled to regard it

as an ultimate and not further explicable fact that Objectives are of two sorts, the true and the false' (Russell, 1910/1992, p.119).

Russell's response to these problems is to abandon the view that judgement consists in a relation between a mind and a single, complex object: 'whether we judge truly or whether we judge falsely, there is no one thing that we are judging' (Russell, 1910/1992, p.120). Rather, judgement is to be understood as a relation between a mind and each of the several terms with which the judgement is concerned. Thus, if I judge that *A* loves *B*, this is not to be conceived as a relation between my mind and the complex 'that *A* loves *B*', but as a relation between my mind and *A*, the relation of loving and *B*. The terms *A* and *B* and the relation of loving are not themselves combined into one single unity, but the relation of judging relates my mind in a unity with these several terms. As a consequence of this, truth and falsity no longer have to be treated as primitive properties of complexes, but as properties of judgements, which can now be explicated in terms of a notion of correspondence: 'Every judgement is a relation of a mind to several objects, one of which is a relation; the judgement is *true* when the relation which is one of the objects relates the other objects, otherwise it is false' (Russell, 1910/1992, p.122). The complex object comprising *A* and *B* related by the relation of loving is now held to exist only if the judgement that *A* loves *B* is true; otherwise the complex does not exist.

Russell's multiple relation theory of judgement undergoes a number of developments between 1910 and 1913. Some of these developments involve Russell's treatment of asymmetric relations and they need not concern us here. There are, however, also significant developments in his conception of the relation of judging itself. As we've just seen, in the 1910 theory, Russell treats the act of judging as a multiple relation in which the mind is related to the constituents of the judgement. The only complex that exists in virtue of the act of judgement itself is the one that comprises the mind's being actually related by the relation of judging to the constituents of the judgement. Russell continues to hold this view in *The Problems of Philosophy* (1912), where he writes:

When an act of believing occurs, there is a complex in which 'believing' is the uniting relation, and the subject and objects are arranged in a certain order by the 'sense' of the relation of believing. Among the objects, as we saw in considering 'Othello believes that Desdemona loves Cassio', one must be a relation—in this instance, the relation 'loving'. But this relation, as it occurs in the act of believing, is not the relation which creates the unity of the complex whole consisting of the subject

and the objects. The relation ‘loving’, as it occurs in the act of believing, is one of the objects—it is a brick in the structure, not the cement. The cement is the relation ‘believing’. When the belief is *true*, there is another complex unity, in which the relation that was one of the objects of belief relates the other objects. (Russell, 1980, p.74)

By the time he writes ‘Theory of Knowledge’ (1913), a work which he did not complete, Russell has recognized that this view of judgement is unsatisfactory. He writes:

I held formerly that the objects alone sufficed [for judgement] and that the ‘sense’ of the relation of [judging] would put them in the right order; this, however, no longer seems to be the case. (Russell, 1913/1984, p.116)

He now sees that the unity that results from the act of judgement itself—i.e. from ‘judges’ occurring as a relating-relation—is not enough to distinguish between a genuine act of judgement and an act that merely brings a series of objects before the mind. He sees that there must be a unity that belongs to the judged material itself, and which distinguishes it from a mere ordered list. He makes the point as follows:

Suppose we wish to [judge] ‘*A* and *B* are similar’. It is essential that our thought should, as is said, “unite” or “synthesize” the two terms and the relation; but we cannot *actually* “unite” them, since either *A* and *B* are similar, in which case they are already united, or they are dissimilar in which case no amount of thinking can force them to become united. (Russell, 1913/1984, p.116)

Russell has therefore to come up with a mode of synthesis—a way of uniting the objects of judgement in thought—that is distinct from the synthesis that creates the fact that *A* is similar to *B*, and thus distinct from uniting them in reality. To this end Russell introduces the notion of ‘form’.

Russell holds that there is a general form corresponding to each kind of atomic proposition (subject–predicate, dual relation, etc). In the case of ‘*A* is similar to *B*’ the relevant general form is the form of symmetrical dual complexes. He suggests that the natural symbolic expression for the form of a complex is given by means of an expression in which all the names have been replaced by variables. Thus, the general form of a symmetrical dual complex is represented by the expression xRy . We are not to think of the form as an object that corresponds to this expression. Rather, xRy is to be thought of as an incomplete symbol that acquires a complete meaning only in a certain context. In the case of forms, the context is a complex (i.e. a fact) which has the

form in question; outside that context, forms do not exist. In order to use the notion of form to repair the problem with his multiple theory of judgement, however, Russell needs a general notion that can be appealed to independently of whether there is any fact corresponding to the judgement. He gets out of the difficulty by taking as the general notion of form the fact that there are complex entities that have the form in question: 'something and something have a certain relation.' Russell argues that since this symbolic expression contains no names, it therefore contains no constituents, and it is this that makes it suitable to serve as the general form of dual complexes. In a sense, he claims, the general form is simple, since it has no constituents and cannot be further analysed. Thus, a logical form is to be conceived as a simple objective, a sort of constituentless fact. A logical form, Russell argues, is not an entity, in the sense that a given particular, universal, or relation is an entity, and as such it is not a constituent in judgement. However, he does hold that logical forms are objective existents, and that we are immediately acquainted with them, through a form of 'logical experience' that is prior to and independent of our making particular judgements; our ability to make particular judgements depends upon this prior acquaintance with logical forms.

Russell now uses this notion of logical form to develop a modified version of the multiple relation theory of judgement. The relation of judging is no longer conceived as a relation between the mind that judges and the objects of the judgement alone. Rather, it is held to be a relation between the mind that judges, the objects of the judgement, and a logical, or general, form. In the case of my judging that *A* is similar to *B*, the logical form is the form of symmetrical dual relations: 'something and something have a certain relation.' It is by putting the objects of the judgement, *A* and *B* and the relation of similarity, into relation with the logical, or general, form that the mind brings about a synthesis of the objects of judgement which is distinct from, and independent of, the synthesis which creates the objective complex, or fact, of *A*'s being similar to *B*. Thus:

The process of "uniting" which we can effect in thought is the process of bringing [the objects of thought] into relation with the general form of dual complexes. The form being 'something and something have a certain relation', our understanding of the proposition [*A* is similar to *B*'] might be expressed in the words 'something, namely *A*, and something, namely *B*, have a certain relation, namely similarity.' (Russell, 1913/1984, p.116)

The central idea of the multiple relation theory of judgement, in both its original and its modified versions, is that judgement is a multiple relation

between a mind and the uncombined constituents of the proposition that is judged. In the context of a psychological verb, the contribution of the embedded propositional sign is to specify the objects of judgement that are combined in the larger complex synthesized by the relation corresponding to the psychological verb. In the modified theory, some act of quasi-synthesis of the constituents of the judgement takes place. However, the act of quasi-synthesis is something that is achieved by the mind in the act of judging, and is not internal to the material that is judged. The quasi-synthesis consists in the mind's putting the objects indicated by the expressions that occur in the propositional sign in relation to something that is external to it: the general, logical form. The role of the general or logical form in judgement is not to unite the constituents of the judgement into a complex; such a complex exists only if the judgement is true. We might think of the role of the general form as one of serving as a logical model which shows how the constituents, for example, *A* and *B* and the relation of similarity, must be combined, if the judgement '*A* is similar to *B*' is true.

5. Wittgenstein's objections to Russell's multiple relation theory of judgement focus on Russell's failure to recognize that the constituents of a judgement essentially occur in it as constituents of a proposition with sense, that is, of a proposition with true–false poles. Russell was clearly correct to reject the 1903 theory, which held that judgement is a relation between a mind that judges and a single complex object. For Wittgenstein, this view is equivalent to treating '*p*' in '*A* judges that *p*' as the name of a complex. Against this, he points out that 'when we say that *A* judges that, etc., then we have to mention a whole proposition which *A* judges' (NL, p.94). Wittgenstein believes that '[t]his shows that a proposition itself must occur in the statement that it is judged' (NL, p.94). That is to say, we cannot substitute the name of a complex—e.g. 'the death of Caesar'—for the proposition in '*A* judges that Caesar died', and so the role of *p* cannot be to stand for a complex. Thus:

In "*a* judges (that) *p*", *p* cannot be replaced by a proper name. This appears if we substitute "*a* judges that *p* is true and not–*p* false". The proposition "*a* judges *p*" consists of the proper name *a*, the proposition *p* with its 2 poles, and *a* being related to both these poles in a certain way. (NL, p.95)

When we say "*A* believes *p*", this sounds, it is true, as if we could here substitute a proper name for "*p*"; but we can see that here a *sense*, not a meaning, is concerned, if we say "*A* believes that '*p*' is true"; and in order to make the direction of *p* even more explicit, we might say "*A* believes that '*p*' is true and 'not–*p*' is false". (NL, p.106)

Russell's response to the defects of his 1903 of judgement is, as we've just seen, to hold that judgement has no single object, but is a multiple relation of the mind to what Russell takes to be the constituents of the proposition judged. The difficulty that Russell himself then struggles with is how to unite these constituents in a way that permits him both to distinguish judging from merely bringing an ordered series of objects to mind, and to allow for the possibility of false judgements. Wittgenstein clearly believes that neither of the versions of the multiple relation theory that I've just described is satisfactory: Russell's account of the form of the proposition '*A* judges that *p*' does not make it perspicuous that the constituents of a judgement occur in it only insofar as they are constituents of a proposition with sense, that is, with true–false poles. Thus:

When we say *A* judges that, etc., then we have to mention a whole proposition which *A* judges. It will not do either to mention only its constituents, or its constituents and form but not in the proper order. This shows that a proposition itself must occur in the statement to the effect that it is judged. (NL, p.94)

Russell's attempt to avoid the problems of his early theory of judgement by treating judgement as a relation to the uncombined constituents of a proposition obscures the fact that what occurs in the context of '*A* judges that . . .' must be a proposition with sense, that is, a proposition with true–false poles. One consequence of this, Wittgenstein argues, is that Russell's theory fails to 'make it impossible for me to judge that this table penholders the book' (NL, p.103; *TLP* 5.5422). The criticism may, at first sight, seem unjust. For Russell clearly does take it as a quite general constraint on judgement that what occurs in the context of '*A* judges that . . .' must be the constituents of a 'logically possible complex' (Russell, 1913/1984, p.112). However, it is also clear that this constraint on the possible content of judgement is not one which Russell succeeds in making internal to the structure of the proposition, '*A* judges that *p*', itself. For there is nothing in the contribution that the expressions that occur on the right hand side of '*. . .* judges . . .' make to the complex, which in itself guarantees that they can be combined in a logically possible complex. Wittgenstein's point against Russell might, therefore, be more fully expressed as follows: Russell's analysis of '*A* judges that *p*' does not make it perspicuous that what occurs on the right hand side of '*. . .* judges . . .' must be a proposition with sense. Thus, Russell needs something *in addition* to his account of the structure of the complex proposition in order to secure the requirement that it is impossible to judge nonsense, that is to say, he needs

to specify which complexes are ‘logically possible’ ones, and thus which constituents can occur together in the context of ‘*A* judges that . . .’. The role that Russell assigns to the constituent expressions in ‘*A* judges that *p*’ does not itself provide this. Wittgenstein clearly thinks that the idea of an external constraint on what can follow ‘judges’ is completely unacceptable; the constraint must be internal to the symbol itself. He makes this point clearly, but telegraphically, in a letter to Russell in June 1913:

I can now express my objection to your theory of judgement exactly: I believe it is obvious that, from the prop[osition] “*A* judges that (say) *a* is in Rel[ation] *R* to *b*”, if correctly analysed, the proposition “ $aRb \vee \neg aRb$ ” must follow directly *without the use of any other premises*. This condition is not fulfilled by your theory. (*CL*, p.29)

Clearly, the only way this requirement can be met is by analysing ‘*A* judges that *p*’ in such a way that it is clear that what replaces *p* is a proposition with sense, that is, a proposition with true–false poles.

Wittgenstein’s criticisms of Russell’s multiple relation theory of judgement amount, therefore, to an outright rejection of the idea that an analysis of a proposition that has another proposition as a part can ignore the sense of the embedded proposition and deal directly with its uncombined constituents. He sums up the point as follows:

At a pinch we are always inclined to explanations of logical functions of propositions which aim at introducing into the function either only the constituents of these propositions, or only their form, etc, etc.; and we overlook the fact that ordinary language would not contain the whole propositions if it did not need them. (*NL*, p.101)

The only way out of the problems that he detects in Russell’s multiple relation theory of judgement is to attend more carefully both to how a proposition expresses its sense and to how a proposition with sense occurs in another proposition. For Wittgenstein, the essential bipolarity of the expression occurring in the context of ‘*A* judges that . . .’ shows that judging is ‘obviously not a relation in the ordinary sense’ (*NL*, p.95). A relation is something that holds between objects, that is, between what is referred to by means of a name. A name is not an expression with sense; it does not have true–false poles. Insofar as the expression that occurs on the right hand side of ‘. . . judges . . .’ must be an expression with sense, it cannot stand for a relatum in a relation. It follows that judging cannot be ‘a relation in the ordinary sense’.

Propositions, insofar as they have sense, cannot be relata, that is, they cannot occur as arguments in relations. In order to understand the nature of a

proposition, we must, Wittgenstein believes, make clear that the way in which a proposition with sense occurs in a larger proposition is quite distinct from the way in which a name occurs in a proposition: 'a proposition cannot have to another *the* internal relation which a *name* has to a proposition of which it is a constituent, and which ought to be meant by saying it "occurs" in it. In this sense one proposition can't "occur" in another' (NDM, p.116). In the analysis of '*A* judges that *p*' that Wittgenstein himself gives, in *TLP* 5.54–5.5423, neither *A*, nor *p*, nor the constituents of *p* occur as relata. To recognize another as expressing a judgement does not involve establishing that one thing (a self, or mind) stands in relation to others (either a proposition or the constituents of a proposition). It is rather to recognize that the sounds that the other utters express a proposition with sense. We then use a proposition of our language with the same sense to give the sense of a speaker's thought or belief. Thus, Wittgenstein makes it clear that *p* in '*A* says *p*', '*A* believes *p*', or the like is essentially a proposition with sense, and that we cannot substitute either a name, or a set of names, for '*p*'. The bipolarity that is essential to a proposition's expressing a sense must be seen to be essential to the way that a proposition occurs in another. Russell's theory of judgement fails to meet this requirement.⁸

6. Wittgenstein's criticisms of Russell's and Frege's treatments of truth and falsity and negation are also directed at showing that each of them fails in the central task of making perspicuous the essential bipolarity of a proposition, that is, in the task of showing how a proposition expresses its sense. I'll look first at truth and falsity. The problems that Wittgenstein raises in 'Notes on Logic' are directed explicitly at Frege's idea that assertoric sentences are names of one or other of two truth-values, the True or the False. Frege first introduces the idea that the *Bedeutung* of a sentence is its truth-value in 'Function and Concept' (1891). Prior to 1891, Frege treats sentences occurring outside the context of the judgement stroke as nominalizations, which he renders by the words 'the circumstance that' or 'the proposition that . . .' (Frege, 1879/1970, 2, p.2). However, sentences are implicitly distinguished from names of objects occurring inside propositions, insofar as they are held to express a judgeable content that can occur in the context of the content stroke and the judgement stroke. In 'Function and Concept', Frege's extension of the range of mathematical functions to include expressions that

⁸ I discuss Wittgenstein's remarks on '*A* judges that *p*' (*TLP* 5.541ff) further in Chapter 11, pp.274–6.

are constructed by means of the signs $=$, $<$, $>$ requires that he identify the value of these functions for different arguments. He argues that insofar as the result of completing, say, the function $x^2 = 1$ with different numbers is an expression that is either true or false, we must recognize that the value of this function for different arguments is a truth-value. He goes on: '[I] distinguish between the truth-values of what is true and what is false. I call the first, for short, the True; and the second, the False. Consequently, for example, " $2^2 = 4$ " stands for the True as, say, " 2^2 " stands for 4. And " $2^2 = 1$ " stands for the False' (Frege, 1891/1970, pp.128–9). The distinction between sentences and names is now abandoned: both are treated as complete expressions referring to objects.

Frege develops and extends the motivation for the claim that the *Bedeutung* of a sentence is its truth-value in 'On Sense and Reference' (1892). He also attempts to give the idea a wider and more intuitive justification. Thus, he argues, on the one hand, that the thought which is expressed by an assertoric sentence is its sense, and on the other, that we can understand the distinction between fiction and scientific enquiry only if we recognize that assertoric sentences have a *Bedeutung* as well as a sense. We are, he argues, concerned with the *Bedeutung* of the components of a sentence only where we undertake an enquiry into its truth-value. He believes that this on its own, independently of the advantages of assimilating concepts to functions, gives us grounds for recognizing that the *Bedeutung* of a sentence is its truth-value:

We are therefore driven into accepting the *truth-value* of a sentence as constituting its reference [*Bedeutung*]. By the truth-value of a sentence I understand the circumstance that it is true or false. There are no further truth-values. For brevity I call the one the True, the other the False. Every declarative sentence concerned with the reference [*Bedeutung*] of its words is therefore to be regarded as a proper name, and its reference [*Bedeutung*], if it has one, is either the True or the False. (Frege, 1892/1970, p.63)

The assimilation of concepts to functions and sentences to names requires Frege to revise his account of the judgement stroke. In the *Begriffsschrift*, Frege introduces the judgement stroke as follows:

A judgement is always to be expressed by means of the sign

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This stands to the left of the sign or complex of signs in which the content of the judgement is given. If we *omit* the little vertical stroke at the left end of the horizontal stroke, then the judgement is to be transformed into a *mere complex of*

ideas; the author is not expressing his recognition or non-recognition of the truth of this. (Frege, 1879/1970, 2, pp.1–2)

The horizontal, or content, stroke is a way of arousing a thought in the mind of the reader, and, as we saw earlier, Frege suggests that we might paraphrase what it symbolizes by the words ‘the proposition that’. After the assimilation of sentences to names, the notion of a judgeable content disappears. To write down a sentence is to write down the name of a truth-value, and Frege explicitly compares it to writing down an arithmetical term referring to a number:

The expressions

“ $0^2 = 4$ ”, “ $1^2 = 4$ ”, “ $2^2 = 4$ ”, “ $3^2 = 4$ ”

are expressions some of true, some of false, thoughts. I put this as follows: the value of the function $\xi^2 = 4$ is either the truth-value of what is true or that of what is false. It can be seen from this that I do not mean to assert anything if I merely write down an equation, but that I merely *designate* a truth-value, just as I do not assert anything if I merely write down “ 2^2 ”, but merely designate a number. (Frege, 1964, 2, p.35)

Frege now abandons any attempt to restrict what follows the horizontal stroke and simply treats it as a function for which he lays down the following rule:

[T]he value of this function shall be the True if the True is taken as argument, and that contrariwise, in all other cases the value of this function is the False—i.e. both when the argument is the False and when it is not a truth-value at all. (Frege, 1891/1970, pp.33–4)

In the light of this revision he acknowledges that the term ‘content stroke’ no longer seems appropriate, and he determines to call it simply ‘the horizontal’. The judgement stroke itself, Frege argues, ‘cannot be used to construct a functional expression; for it does not serve, in conjunction with other signs, to designate an object, “ $\vdash 2 + 3 = 5$ ” does not designate anything; it asserts something’ (Frege, 1891/1970, fn.*, p.34). However, in both the *Begriffsschrift* and in Frege’s later work, the judgement stroke is conceived as an essential part of the symbolism, insofar as it is required to transform what is essentially a name into something that expresses a judgement; the difference is only that in the early work the name stands for ‘a . . . complex of ideas’ that is a judgeable content, and in the later it stands for an object: the True or the False. Thus, in ‘Function and Concept’ he writes:

[B]y writing

$$\vdash 2 + 3 = 5$$

we assert that $2 + 3$ equals 5 . Thus here we are not just writing down a truth-value, as in

$$2 + 3 = 5$$

but also at the same time saying that it is the True. (Frege, 1891/1970, p.34)

7. Wittgenstein's remarks on truth and falsity are clearly directed at these aspects of Frege's post-1891 thought. His aim is to show that insofar as Frege holds that true and false propositions designate distinct but equivalent entities, the True and the False, he fails to make the relation between sense and truth and falsity perspicuous. In treating the *Bedeutung* of true sentences as an equivalent and distinct object from the *Bedeutung* of false sentences, Wittgenstein believes that Frege fails to make it clear that each proposition with sense essentially has *two* poles—a true pole and a false pole—each of which excludes the other. Wittgenstein's remarks on truth and falsity in 'Notes on Logic' all survive virtually unchanged in the *Tractatus* (see *TLP* 4.061–4.063). He begins by observing:

If we overlook the fact that propositions have a *sense* which is independent of their truth or falsehood, it easily seems as if the true and the false were two equally justified relations between a sign and what it signified. (NL, p.97)

To understand a proposition is to grasp its sense. To grasp the sense of a proposition is not a matter of knowing which truth-value it denotes, but of grasping what it is for the proposition to be true and, by the same stroke, what it is for it to be false. It is not merely that we grasp the sense of a proposition independently of knowing its truth-value, but that truth and falsity represent opposite poles for a single proposition. Wittgenstein believes that an account that holds that true and false propositions are names of distinct and equivalent objects obscures the essential bipolarity that he takes to constitute the sense of a proposition. It is to treat propositions as either signifying the True or signifying the False—i.e. to treat these as two distinct ways in which propositions signify—and thus obscure the essential relation that each proposition with sense has to *both* true–false poles.

Ricketts observes that Frege himself acknowledges the essential bipolarity of propositions in a pre-1891 manuscript:

Before we judge, we frequently raise a question . . . We grasp the content of a truth, before we recognize that content as true. But we grasp not merely this, but also the opposed content. For with the question we are caught between two opposites . . . This

opposition or conflict is to be understood so that we automatically reject one side as false when we recognize the other as true, and vice versa. The rejection of the one and the acceptance of the other are the same. (Frege, 1979, p.8, quoted in Ricketts, 2002, p.244)

Thus, to grasp the sense of a proposition is, by the same stroke, to grasp a proposition that is opposite in sense, and to recognize that one is true if and only if the other is false. This is not the sense of bipolarity that is central to Wittgenstein's concept of sense, which implies that a proposition has a relation to *both* truth-values, and which therefore entails contingency. However, there is nevertheless a recognition that the sense of p and of $\neg p$ stand in an essential relation of opposition to one another, so that 'rejection of one and acceptance of the other are the same', which Wittgenstein believes is neglected when Frege takes propositions to be names of truth-values. According to Wittgenstein, an account that holds that true and false propositions are names of two distinct and equivalent objects renders the relation of opposition between p and $\neg p$ invisible. Thus, the objects which Frege postulates as the *Bedeutung* of true and false propositions are, as objects, both independent of each other and have no essential connection with the concept of sense: the essential connection between sense and the mutually exclusive possibilities of truth and falsity is not made perspicuous. Frege speaks of these objects as 'opposites' to one another, but Wittgenstein objects that 'opposite' must here be understood, not as a logical relation, but as 'an indefinable relation' (NL, p.107) (i.e. an external relation) between two objects. On this conception, he believes, it would not be obvious, even if it were true, that every proposition has a sense that is either true or false.

Wittgenstein connects what he sees as Frege's mistaken conception of truth and falsity with what he sees as the mistaken idea that p and $\neg p$ can be treated independently of one another:

(We might then say, e.g., the " q " signifies in the true way what "not- q " signifies in the false way.) (NL, p.97)

Thus, if we understand truth and falsity in terms of equivalent objects of designation, then we might say that we use ' p ' to signify the True and ' $\neg p$ ' to signify the False, and thus fail to make clear the essential relation between p and $\neg p$. In particular, we fail to make clear that our grasp of the sense of $\neg p$ is essentially dependent upon our grasp of the sense of p . It is reasonable to suppose that Wittgenstein's worry here mirrors the concerns of the previous paragraph. Thus, just as the above account of truth and falsity obscures

the essential connection between the sense of a proposition and its possessing true–false poles, so it leads to an account of negation which fails to make perspicuous the internal relation between the sense of $\neg p$ and the sense of p . An account that connects p with one way of signifying and $\neg p$ with another does not make clear the internal relation of opposition that the sense of p and the sense of $\neg p$ bear to one another. Thus, it is simply not clear, on such an account, why p and $\neg p$ are opposed, that is, why one must be the case if the other is not the case; all trace of contradictoriness of p and $\neg p$ has evaporated from this account of what p and $\neg p$ signify.

It might be objected here that, whatever the force of the above objection, it has no bearing on Frege’s own treatment of negation. Frege is quite clear that negation is not to be thought of as part of a sign that is employed ‘to declare a truth-value to be the False’ (Frege, 1964, 6, p.10). Rather, he introduces negation as a function for which the following rule holds:

The value of the function

$$-|- \xi$$

shall be the False for every argument for which the value of the function

$$-\xi$$

is the True, and shall be the True for all other arguments. (Frege, 1964, 6, p.39)

It is clear, however, that Wittgenstein does take Frege’s account of negation to be subject to exactly the sort of objection I have just outlined. He makes the point quite explicitly in the *Tractatus* as follows:

(. . . Frege was quite right to use [truth-conditions] as a starting point when he explained the signs of his conceptual notation. But the explanation of the concept of truth that Frege gives is mistaken: if ‘the True’ and ‘the False’ were really objects, and were the arguments in $\neg p$, etc, then Frege’s method of determining the sense of ‘ $\neg p$ ’ would leave it absolutely undetermined.) (*TLP* 4.431)

Thus, even though Frege is correct to introduce the logical connectives by specifying the truth-conditions of the resulting proposition relative to the truth-values of the propositions that are its bases, Frege goes wrong insofar as he treats the connectives as genuine functions. Thus, on Frege’s account, negation is a function that takes us from one object as argument to another object as value; given the *Bedeutung* of p , we can determine the *Bedeutung* of $\neg p$. Not only that, but it ensures that, whichever of the two truth-values p denotes, $\neg p$ will denote the other. However, this way of “determining the sense of ‘ $\neg p$ ’” tells us nothing about the relation between the sense of p and

the sense of $\neg p$, in particular, it does not tell us that p and $\neg p$ are of opposite senses. It is in virtue of the fact that $\neg p$ has a sense such that $\neg p$ is true in exactly the circumstances in which p is false that p and $\neg p$ are essentially opposite in truth-value. Not only is there nothing in Frege's account that makes it perspicuous that $\neg p$ is of opposite sense to p , but there is nothing in the account that shows how the sense of $\neg p$ is determined. To treat the negation sign as a function which takes truth-values as arguments is to fail to give a means to determine the sense of $\neg p$; the sense of $\neg p$ remains 'absolutely undetermined'.

The above objection is an attempt to show the difficulties that we get into if we treat propositions as names that stand for entities. Wittgenstein further criticizes the idea that the truth or falsity of a proposition can be treated on the model of a name's relation to an object as follows. Couldn't we, he asks, decide to express ourselves by means of false propositions, as we have hitherto done with true ones, provided that we know that they are meant to be false? Clearly, the idea that we could do so assumes that we have some grip on the notions of truth and falsity that is independent of their role in a practice of asserting propositions with sense. Thus, we have an idea of what it is that a given proposition designates that is independent of an understanding of its sense. We could, therefore, decide that although these propositions designate THAT truth-value (the False) we are using them in such a way that we mean THIS truth-value (the True). In the same way we might decide that although 'black' designates THAT property (black) we are using it in such a way that we mean THIS property (white). Wittgenstein now shows that this is nonsense. For our idea of what it is for a proposition to be true is just the idea of our using it 'to say that things stand in a certain way, and they do' (*TLP* 4.062). Thus, if we use the symbol ' p ' to assert that p is false, and things are as we assert them to be, then p is true and not false: 'a proposition is then true when it is as we assert in this proposition; and accordingly if by " q " we mean "not- q ", and it is as we mean to assert, then in the new interpretation " q " is actually true and *not* false' (NL, p.97). Thus, we have no idea of truth or falsity that is independent of the idea of the correctness or incorrectness of what we assert by means of a proposition with sense. Propositions have sense, and their sense is such that the proposition is true if things are as we assert them to be in asserting it, and false otherwise. The notions of the truth or falsity get no grip independently of the sense of a proposition, that is, independently of the true-false poles of what I express by means of a propositional sign.

Once again, Wittgenstein connects the point with a point about negation. Earlier we saw him argue that if we treat propositions as names and the negation sign as a sign of a genuine function, then we cannot make perspicuous the essential connection between truth and falsity and the sense of a proposition with true–false poles. He now makes the same point from the opposite direction. Thus, Wittgenstein’s thought experiment is an attempt to get us to see that what is essential to a proposition is its sense, and that sense is determined by the circumstances under which we call it true and the circumstances under which we call it false. The sense of a proposition is essentially connected with its having true–false poles. However, what we now see is that what is essential here is the opposition between the circumstances under which we call it true and those under which we call it false, and not how this opposition is symbolized. We are brought to recognize this when we see that what we now symbolize by $\neg p$ could equally well be symbolized by p . By the same stroke, Wittgenstein believes, we recognize that the negation sign cannot be a sign for a genuine function: it is not an essential part of the sense of what is expressed by the symbol ‘ $\neg p$ ’. What is essential is that $\neg p$ is opposed to p , that is, that it is true in exactly those circumstances in which p is not true; there is nothing over and above this opposition expressed by the symbols p and $\neg p$. What this shows, Wittgenstein believes, is ‘that neither to the symbol “not” nor to the manner of its combination with “ q ” does a characteristic of the denotation of “ q ” correspond’ (NL, pp.97–8; cf. *TLP* 4.0621). It is, in other words, the same constituents that make both p and $\neg p$ true or false; $\neg p$ does not have more constituents than p as it occurs in isolation. The idea of the denotation of a proposition has disappeared in the *Tractatus*, but the idea that $\neg p$ does not have a content over and above the content of p remains:

But it is important that the signs ‘ p ’ and ‘ $\neg p$ ’ can say the same thing. For it shows that nothing in reality corresponds to the sign ‘ \neg ’.

The occurrence of negation in a proposition is not enough to characterize its sense ($\neg \neg p = p$).

The propositions ‘ p ’ and ‘ $\neg p$ ’ have opposite sense, but there corresponds to them one and the same reality. (*TLP* 4.0621)

Wittgenstein further explores what he sees as the deficiencies in Frege’s account of truth and falsity by means of the following analogy:

Consider a black patch on white paper; then we can describe the form of the patch by mentioning, for each part of the surface, whether it is white or black. To the fact that

a point is black corresponds a positive fact; to the fact that a point is white (not black) corresponds a negative fact. (NL, p.99; cf. *TLP* 4.063)

Thus, we are to imagine that each particular designated point, *a*, corresponds to a proposition (the name of a truth-value), *p*, and that *p* designates the True if *a* is black and the False if *a* is not black. Wittgenstein now asks us to imagine that we designate a particular point, *A*, and ask whether *A* is black or white. By analogy, this is equivalent to asking whether the corresponding proposition, *p*, designates the True or the False. It is, he says, 'as if I set up an assumption to be decided upon' (NL, p.99; cf. *TLP* 4.063). The 'assumption' corresponds to Frege's writing down the name of a truth-value, without saying which of the two it is. It is clear that in order now to say whether *A* is black or white, I must already know when a point is called black and when it is called white. This does not threaten the analogy, for in order to be able to say whether a proposition designates the True, I must already have determined the circumstances under which I call it true. To determine the circumstances under which I call a proposition true is to determine the sense of the proposition. However, Wittgenstein thinks it now becomes clear how the analogy breaks down. For we can indicate a point on the paper that is black or white without ourselves knowing what black and white are, but if we have not determined the sense of a proposition, then there is nothing that is true or false, nothing that possesses the properties of truth or falsity. It is not merely that in order to be able to *say* that a proposition, *p*, is true, I must have determined the circumstances under which I call *p* true, but that the notions of truth and falsity are themselves essentially connected with our having determined the sense of a proposition. The notions of truth and falsity are essentially the notions of the opposite poles of a proposition with sense. Thus, the analogy breaks down: a proposition does not designate an object with the property of truth or falsity in the way that a name might designate a point with the property of being black or white.

Wittgenstein sums up the point of this objection to Frege as follows:

[T]he verb of a proposition is not "is true" or "is false", as Frege believes, but what is true must already contain the verb. (NL, p.100; cf. *TLP* 4.063)

The criticism is problematic insofar as it suggests, quite wrongly, that Frege introduces a special sign to declare that a proposition designates the False.⁹

⁹ Frege writes: 'We need no special sign to declare a truth-value to be the False, so long as we possess a sign by which either truth-value is changed into the other' (Frege, 1964, §6, p.10).

However, if this difficulty is left aside, Wittgenstein's fundamental objection to Frege's introduction of the judgement stroke remains. The verb of a proposition is the copula, that is, it is what combines the terms of a proposition into an expression with a sense. Wittgenstein's objection to Frege is that in assimilating propositions to names, he is essentially denying that a proposition, in and of itself, constitutes an expression with sense, that is, an expression with true–false poles. For Frege, a proposition is simply the name of one of two truth-values. As we saw earlier, Frege himself appears to acknowledge this when he allows that writing down an equation is equivalent to writing down 2^2 ; both expressions are names of objects and both expressions can be used to fill the argument-place in the function name '— ξ ', that is, both can be used in the expression of an assumption. Frege therefore accepts that in order to achieve something that expresses a judgement, that is, something that can be correct or incorrect, we need an additional 'special sign', namely the judgement stroke. The judgement stroke is not itself a function, but it is only by placing the name of a truth-value in the context of a judgement stroke that we move from naming an object to expressing something with the bipolarity which Wittgenstein takes to be the defining feature of sense. This is what Wittgenstein means when he says that Frege believes that the verb of a proposition is "is true" or "is false": it is only when we assert, by means of the judgement stroke, that the proposition designates the True that we achieve something with the essential bipolarity of a proposition. Wittgenstein believes that the breakdown of the above analogy shows that this cannot be correct: an expression cannot designate a truth-value independently of the sense of a proposition, that is, independently of an expression with true–false poles. Thus, what is asserted as true or false must already have true–false poles; it must already have the essential bipolarity of a proposition; it 'must already contain the verb'.

8. The general theme of Wittgenstein's objections to both Russell's theory of judgement and Frege's treatment of negation and of truth and falsity is that the sense—i.e. the essential bipolarity—of a proposition precludes the assimilation of propositions to names. By the same stroke, we cannot treat propositions as relata in genuine relations or as arguments in genuine functions. The problem of how a proposition expresses its sense is thus seen to be inextricably linked to the problem of how one proposition occurs in another. The problem shows up in its most urgent form in connection with the treatment of the logical constants. Wittgenstein's remarks on what he sees as the deficiencies in Frege's and Russell's views of the logical constants amount, in

the end, to different ways of making this one fundamental point: the logical constants cannot be assimilated to genuine functions or relations; they cannot be held to make a substantive contribution to the sense of propositions in which they occur. We've already seen Wittgenstein object to Frege's treatment of the negation sign on the grounds that it fails to make the relation between p and $\neg p$ perspicuous. He argues on similar grounds that it fails to clarify the logical relation between p , $\neg\neg p$, $\neg\neg\neg\neg p$, and so on. If, as Frege and Russell hold, the negation sign is a genuine function that makes a substantive contribution to the proposition expressed by $\neg p$, then each of the propositions in the series p , $\neg p$, $\neg\neg\neg\neg p$, and so on is distinct. Yet we recognize that if any one of them is true, they all are. How is this possible? How can we recognize that from the truth of p the truth of an infinite number of propositions follows? Wittgenstein thinks it is much more plausible to hold that a correct account of the symbolism will make it clear that p and $\neg p$ and $\neg\neg\neg\neg p$ are all the same symbol. This depends, however, on our making clear that the negation sign makes no contribution to the content of these propositions. Wittgenstein sums up the point as follows:

In not- p , p is exactly the same as if it stands alone; this point is absolutely fundamental. (NL, p.95)

That is to say, p and $\neg p$ must be seen to have the same content: p does not occur in $\neg p$ as an argument in a complex expression whose content includes constituents that are not constituents of p .

The point applies to the logical constants generally. The logical constants cannot 'be predicates or relations, because propositions, owing to sense, cannot have predicates or relations' (NL, p.99). Thus, Wittgenstein believes that what is manifest in the case of negation—namely, that it does not introduce anything new—applies equally to all the logical constants. The content of a molecular proposition must, in general, be nothing over and above the content of its atomic constituents. Wittgenstein makes the point as follows:

Molecular propositions contain nothing beyond what is contained in their atoms; they add no material information above that contained in the atoms. (NL, p.98)

Russell's and Frege's accounts of the logical constants fail this test. Given that \neg , $\&$, \vee , \rightarrow are held to be genuine functions or relations, Wittgenstein believes that the logical relations which are the essence of the proposition are inevitably obscured. If we assimilate propositions to names and hold that the logical constants make a substantive contribution to the sense of

molecular propositions, then it is not made perspicuous that p and $\neg p$ have the same content but opposite senses, or that p and $\neg\neg p$, or $p \rightarrow q$ and $\neg(p \ \& \ \neg q)$, are the same proposition. Wittgenstein believes that it is only an understanding that starts from the sense—i.e. the bipolarity—of a proposition that will escape the confusion that Russell's and Frege's accounts create. In order to understand the nature of a proposition, we must clarify the essential distinction between propositions and names; and in order to do that we must show that the logical constants are not genuine functions; and in order to do that we must show that the content of a molecular proposition is nothing over and above the content of its atoms. Understanding how a proposition expresses its sense cannot be separated from the problem of seeing how a molecular proposition is a function of the sense of its constituent propositions, without itself introducing anything new. This is the fundamental problem—the 'single great problem'—that Wittgenstein believes is posed by what he sees as the deficiencies in Frege's and Russell's accounts of judgement, truth and falsity, and negation. In the next chapter, we'll look at the connection that Wittgenstein makes between this problem and the deficiencies in Frege's and Russell's conceptions of logic.

3

Wittgenstein's Critique of Frege and Russell 2: The Propositions of Logic

1. In an unpublished manuscript, written in 1897, Frege writes: 'the word "true" can be used to indicate [the] goal of logic' (Frege, 1979, p.139). The remark expresses what is distinctive in the conception of logic that is shared by Frege, Russell, and Wittgenstein, namely its concern with what is essential to all thought insofar as it aims at the truth. On this conception, logic is not the study of formal systems and their interpretation, but is rather 'a systematisation of reasoning in general, of reasoning as such' (Hylton, 1990, p.203). The laws of logic are not defined, as they are in modern logic, at the meta-level, as all the valid formulas, that is, all the formulas that are true under all interpretations of the non-logical symbols. Logic concerns the essence of judgement; the notions of a formal language and an interpretation of it are completely foreign to this way of thinking. The laws of logic are conceived as 'what holds with the utmost generality of all thinking, whatever its subject matter' (Frege, 1979, p.139). Logic is the framework of all thought, the condition to which judgement must conform if it is to aim at the truth. There is no meta-perspective on what is conceived to be essential to all thought and all reasoning. This conception of logic goes along with a profound anti-psychologism: if logic is concerned with the laws of thought, then this term is not to be understood in the sense of natural laws that describe how human beings think. The laws of thought that logic is concerned with have an absolute, rather than an empirical, status; they are not relative to thinkers or to the subject matter of thought; they hold a priori and universally; a logical law 'prescribes the way in which one ought to judge, no matter where, or when, or by whom the judgement is made' (Frege, 1964, p.15). It is within this overall framework that Frege and Russell develop what is known as their universalist conception of logic, that is, their idea that logic is a system of maximally general truths. Although Wittgenstein by and large shares the general conception of logic as the essence of thought, he

sees the idea of logic as a system of maximally general truths that justify inferences from one proposition to another, as deeply problematic. The idea is, he believes, in conflict with the framework intuition—that logic is the essence of all thought—that it is intended to ground.

2. The core intuition is that logic is the essential framework of all thought insofar as it aims at truth. For both Frege and Russell, this core intuition amounts to the idea that logic is concerned with the laws whereby we justifiably move from one judgement or assertion of truth to another. And for both of them, the objectivity of truth requires that the laws that necessarily govern all thought that aims at truth, or all inferences from one true proposition to another, are themselves grounded in objectivity. Given that the truth of a thought is completely independent of our recognition of it, the laws by which one assertion is derivable from another must constitute objective laws of truth. Thus, the practice of inference and justification, which is the concern of logic, must be shown to be grounded in objective laws of truth, which are as independent of us and our thoughts as the laws of any other science. In this way, both Frege and Russell make the notion of the laws of logic—conceived as objective, maximally general truths—central to their conception. Frege writes:

Our conception of the laws of logic is necessarily decisive for our treatment of the science of logic, and that conception in turn is connected with our understanding of the word “true”. (Frege, 1964, p.12)

If being true is thus independent of being acknowledged by somebody or other, then the laws of truth are not psychological laws: they are boundary stones set in an eternal foundation, which our thought can overflow, but never displace. It is because of this that they have authority for our thought if it would attain to truth. (Frege, 1964, p.13)

Logic is concerned with the laws of truth, not with the laws of holding something to be true, not with the question of how people think, but with the question of how they must think if they are not to miss the truth. (Frege, 1979, p.161)

Russell makes the same point about the objectivity of the laws that ground our principles of reasoning as follows:

The name ‘laws of thought’ is . . . misleading, for what is important is not the fact that we think in accordance with these laws, but the fact that things behave in accordance with them; in other words, the fact that when we think in accordance with them we think *truly*. (Russell, 1980, pp.40–1)

For both Frege and Russell, the grounding intuition that logic is the essential framework for all thought insofar as it aims at the truth leads directly to the idea of a science of logic, that is, to the idea of logic as a system of objective, completely general truths that grounds our practice of inference. This idea in turn becomes the framework assumption within which their detailed understanding of the nature and status of the propositions in which the laws of logic are expressed is worked out. The symbols used to express these completely general laws constitute the indefinables of logic. They are of two kinds: variables and logical constants. Frege understands the statement of logical laws, such as $(p \rightarrow q) \rightarrow (-q \rightarrow -p)$, as an implicitly quantified statement in which the propositional variables are bound by universal quantifiers: $(\forall p)(\forall q)((p \rightarrow q) \rightarrow (-q \rightarrow -p))$. The domain over which the variables range is the *Bedeutungen* of propositions, the truth-values, the True and the False: 'the laws of logic are first and foremost laws in the realm of *Bedeutungen* and only relate indirectly to sense' ('Comments on *Sinn* and *Bedeutung*', p.133). In the case of laws that generalize in name and predicate positions, such as $(\forall x)(\forall y)(\forall F)((x = y) \rightarrow (Fx \rightarrow Fy))$, the quantified variables range over the *Bedeutungen* of names and predicates, that is, over individuals and concepts.

The variables and the logical constants occurring in the completely general propositions of logic constitute the logical indefinables, the fundamental notions of logic, and the entities over which the variables range constitute the domain of the science of logic. The domain comprises entities—concepts, relations, truth-values—that are not to be found in the spatial world. Human beings have, Frege believes, an understandable tendency to ignore or even deny the existence of what cannot be perceived. However, a rigorous scientific investigation of the a priori sciences forces us to recognize the existence of entities of a non-sensible kind. The universalist conception of logical laws as maximally general truths makes higher order quantification over the *Bedeutungen* of predicates and sentences essential, and this has inevitable consequences for ontology. Warren Goldfarb makes the point as follows:

It should be clear that the universalist conception *demands* that sentences and predicates refer . . . [F]or Frege the truth-functional laws look like ' $(\forall p)(\forall q)(p \& q \rightarrow p)$ ' and will be applied by instantiating the quantifiers with sentences. For 'If Cassius is lean and Cassius is hungry then Cassius is lean' to count as a genuine instance of the law, the expressions which instantiate the quantified variables have to refer to things that are values of the variables . . . Similarly, since the laws of logic include many that generalize in predicate places, and their application requires instantiating

these quantified variables with predicates, here too we are driven to take predicates as referring expressions. (Goldfarb, 2001, p.29)

Russell's understanding of the generality of logical laws in the *Principles of Mathematics* is equally ontologically committed. However, Russell takes the complete generality of logical laws to be incompatible with placing any restrictions on the range of the variables occurring in them. There is, he holds, only one sort of variable in logic and it ranges over all entities: 'By making our x always an unrestricted variable, we can speak of *the* variable, which is conceptually identical in Logic, Arithmetic and Geometry, and all other formal subjects. The terms which are dealt with are always *all* terms' (Russell, 1964, p.91). Peter Hylton sums up Russell's view of logic as follows:

On Russell's conception of logic . . . there is no question of our specifying what the variables are to range over; they range over everything. It is thus part of his conception that there is no room for specification of a universe of discourse. (We might say that the only universe of discourse, on Russell's conception of logic, is *the* universe, the actual universe, comprising everything that there is. To say this, however, is to reject the notion of a universe of discourse within which the range of variables is confined.) Thus the propositions of logic are wholly general: they contain variables, and the variables range over everything. (Hylton, 1990, p.201)

Given the unrestricted range of the variables, Russell has to incorporate, within the proposition stating a law of logic, the condition of the law's application. Thus: 'the notion of the restricted variable can be avoided . . . by the introduction of a suitable hypothesis, namely the hypothesis expressing the restriction itself' (Russell, 1964, p.91). A logical law, such as $(p \& q) \rightarrow p$, must therefore be rewritten to include a statement which restricts the applicability of the law to propositions. Taking the relation of material implication as a logical primitive, Russell defines a proposition as something which materially implies itself. For Russell, ' x is a proposition' is equivalent to ' x implies x '. He is able, therefore, to introduce a hypothesis expressing the required restriction as follows: $((p \rightarrow p) \& (q \rightarrow q)) \rightarrow ((p \& q) \rightarrow p)$. In this way, Russell attempts to restrict the application of the law to propositions without imposing any restrictions on the domain of the variables that occur in the statement of the law. The whole statement is to be understood as a universally quantified statement in which the range of the quantifier is expressed in English by the words 'For any term . . . '.

For Russell, therefore, the primary indefinables of logic are the logical constants, conceived as functions and relations, and a single variable ranging over

everything. Russell does not believe that logical laws are concerned exclusively with propositions. In addition to the calculus of propositions, which we looked at in the previous paragraph, there is also a calculus of classes and a calculus of relations. Russell's conception of logic as maximally general truths is, therefore, as ontologically demanding as Frege's. He requires the existence of entities—propositions, universals, relations—which are the values of the variables to which a particular logical law is applicable. However, in Russell's case, the ontological demands of the universalist conception eventually come to pose a difficulty. As we saw in the previous chapter, in 1910 Russell abandons his commitment to an ontology of propositions and develops the multiple relation theory of judgement. This development makes it impossible to understand how Russell can regard logical laws as generalizations about propositions. This problem leads Russell to try to develop a view of logical propositions as constituentless judgements. In the unfinished manuscript, *Theory of Knowledge*, Russell begins to develop the view that logic is concerned with "pure forms". The logical constants are no longer thought of as functions and relations of propositions, but are seen as 'really concerned with pure *form*, and . . . not actually constituents of the propositions in the verbal expression of which their names occur' (Russell, 1913/1984, p.98). The symbol expressing a logical law is no longer conceived as a universally quantified proposition, but as a constituentless logical object, a pure form.

Russell acknowledges that he is quite unsure what sort of account should be given of pure forms. He sees our acquaintance with them as the basis of our understanding of such words as 'predicate', 'relation', 'dual complex', and of the logical constants 'not', 'or', 'all', and 'some', though he feels himself quite unable to say what the logical objects involved in this understanding really are. The view remains undeveloped and it is not clear that it is coherent. Wittgenstein himself is clearly dismissive of the notion of logical forms that lies at the heart of Russell's attempt to do without propositions. However, most of the anxieties that Wittgenstein expresses in connection with the treatment of logic relate to the version of the universalist conception that is expressed in the *Principles of Mathematics*. This is the view, which Russell shares with Frege, that the laws of logic are conceived as universally quantified, maximally general truths; we must think in accordance with these general laws of truth, if we are to think truly.

Frege and Russell are led by their overall conception of logic to present the system of logical laws as an axiomatic system. Given the framework assumption that logic is the science of maximally general truths, the axioms are not

regarded as a matter of stipulation, but are held to be primitive truths of logic. It is acknowledged that there is an element of arbitrariness in the choice of which basic laws are given the status of axioms, but it 'is part of the concept of an axiom that it can be recognized as true independently of other truths' (Frege, 1979, p.168). Given the overall conception of logic as a body of knowledge, there is a premium on justifying everything that can be justified. Thus, Frege and Russell choose from among the primitive logical laws, immediately recognized as self-evident, a set of axioms that suffice for the derivation of all the laws of logic. Given the universalist conception, and the lack of a distinction between object-language and meta-language, there is no question of proving the completeness of the logical system; completeness must remain at the level of an assumption. Aside from the logical primitives and the axioms, Frege and Russell also require rules of inference. Again, there is held to be an advantage in keeping these to a minimum, and both Frege and Russell make use of only two: *modus ponens* and a principle of substitution. These rules are used to derive further logical laws from the axioms and to derive particular instantiations of the laws. A proposition containing non-logical constants is an instance of a logical truth if it is a substitution instance of a basic or derived logical law. A particular inference from one concrete proposition to another is logically justified if it is made according to the mode of inference recognized as purely logical (i.e. *modus ponens*), from premises that are either empirical truths or substitution instances of a logical law. In this way, our inferential practice is seen to be grounded in the objective, maximally general laws of logic; our modes of inference are recognized as legitimate insofar as any given movement from premises to conclusion is seen to be justified by an objective logical law, using a recognized logical rule of inference.

3. The problem of making the nature and status of the propositions of logic perspicuous is the essential heart of Wittgenstein's fundamental task of clarifying the nature of a proposition. The worries that he raises for the universalist conception of logic concern its failure to make manifest the unique status of the propositions of logic. The criticisms are detailed, wide-ranging, and scattered throughout 'Notes on Logic', the *Notebooks*, and the *Tractatus*. Let's begin by looking at the objection he raises to the central idea of the universalist conception, namely, that the laws of logic are maximally general truths, that is, universally quantified statements expressing universal truths equivalent to the laws of the special sciences. Wittgenstein's criticisms of the latter

idea ultimately focus on the question whether the propositions of logic are properly understood as general propositions, that is, on whether the generality sign is fundamental to logic.

One of the main themes of Wittgenstein's reflections on the propositions of logic in the *Notebooks* is the attempt to make clear the distinction between the propositions of logic and fully generalized, material propositions in which all the constants have been replaced by variables. Clarification of this distinction is fundamental to Wittgenstein's overall aim to make clear that the sort of generality that belongs to the propositions of logic is quite distinct from the merely accidental generality of general empirical propositions. The generality that characterizes logic has nothing to do with general truth, but with the generality of logical form, that is, with something that abstracts from all content. On Wittgenstein's understanding, the propositions of logic are seen to be completely distinct from fully generalized, material propositions. Thus, Wittgenstein's investigation of the nature and status of the propositions of logic is ultimately directed at bringing us to recognize that the propositions of logic have no substantive content; unlike completely general propositions, they do not represent or assert anything about the world. For Wittgenstein, the one and only logical primitive employing variables and logical constants—the general form of a proposition—has the status, not of a general proposition whose constituents are logical indefinables, but of a variable that expresses what all propositions have in common, that is, which corresponds to a logical form. The general form of a proposition is equivalent to a rule for the construction of all propositions and it has all propositions, including all the tautologies and contradictions that constitute the propositions of logic, as its values. Logic is no longer seen as a system of maximally general truths, but is seen to concern everything that is essential to a proposition's expressing a sense, that is, to its being a symbol that can be compared with reality for truth or falsity. Thus, the whole idea of a science of logic evaporates. What we are concerned with in this chapter, however, is the problems that Wittgenstein believes to arise out of Frege's and Russell's attempts to treat logic as a science and assimilate the propositions of logic to maximally general truths.

I suggested earlier that we should see Wittgenstein's criticisms of Frege and Russell as an attempt to show how their accounts come into conflict with our inchoate understanding of the order in our knowledge of the use of language. One of his objections to the view that the propositions of logic are

maximally general truths is that he believes this obscures the fact that the particular instances of a logical proposition are clearly senseless, that is, clearly say nothing about the world. Thus:

A function is like a line dividing points of a plane into right and left ones; then “ p or not- p ” has no meaning because it does not divide the plane. But though a particular proposition, “ p or not- p ”, has no meaning, a general proposition, “for all p 's, p or not- p ”, has a meaning because this does not contain the nonsensical function “ p or not- p ” but the function “ p or not- q ” just as “for all x 's, xRx ” contains the function “ xRy ”. (NL, pp.94–5)

This passage is written at a time at which Wittgenstein shares Russell's view that the propositions of logic are universally quantified statements. However, unlike Russell, he combines this view with an overall rejection of the idea that the propositions of logic are maximally general truths, equivalent to the general laws of the special sciences. Thus, on Wittgenstein's view, the fully generalized proposition $(p)(pv-p)$ is not to be understood as a substantive law that is true of everything, but as a generalization of the senseless tautology $pv - p$. A particular instance of a proposition of the form ' $pv-p$ ' is senseless: 'If I know that this rose is either red or not red, I know nothing' (NL, p.104). A particular molecular proposition of the form ' $pv-p$ ' is constructed from its elements in such a way that the resulting proposition clearly lacks sense, that is, lacks true-false poles. Thus, Wittgenstein believes that we must be careful to distinguish the general propositions of logic from generalizations of material propositions. On his view, construing $(p)(pv-p)$ as a substantive general truth about logical objects, obscures this distinction. What characterizes the general propositions of logic is that they are all generalizations of tautologies. The generalized proposition, Wittgenstein argues, is not itself senseless, insofar as it simply employs a single variable in two argument places, and is thus analogous to $(x)xRx$, in which the same variable occupies both argument places in the function xRy . The whole quantified statement is, therefore, a proposition with sense, even though the propositions of which it is a generalization are senseless. As we'll see, he gradually becomes dissatisfied with this account of the propositions of logic.

4. In the final remark in the *Notebook*'s entry for 13.10.14, Wittgenstein writes:

But let us remember that it is the *variables* and *not* the sign of generality that are characteristic of logic. (NB, p.11)

His first reflection on the following day runs as follows:

For is there such a thing as the science of completely generalized propositions? This sounds extremely improbable. (*NB*, p.11)

This marks the beginning of Wittgenstein's rejection of the idea that the relation between the propositions of logic and elementary propositions is one of generalization, that is, of the view that the generality sign has any role to play in logic. Thus, he goes on to reflect that if the propositions of logic are general propositions with sense, then their sense does not depend upon the conventional meaning of any sign. These are propositions that express a sense by means of their logical properties alone, and they can therefore be recognized as true a priori. For Wittgenstein, these characteristics of logical propositions now begin to point in a different direction: to their not being general propositions with sense at all:

This is clear: If there are completely generalized propositions, then their sense does not depend on any arbitrary formation of signs! In that case, however, such a connexion of signs can represent the world only by means of its own logical properties, i.e. it cannot be false, and not true. So there are no completely generalized *propositions*. (*NB*, p.12)

Something that expresses a sense by means of its own logical properties, and whose truth can be recognized on the basis of the symbol alone, cannot, Wittgenstein now believes, be properly thought of as expressing a sense at all, that is, it cannot properly speaking be a general proposition: 'There are no such things as analytic *propositions*' (*NB*, p.21).

These reflections prompt Wittgenstein to raise a number of questions: What is the relation between elementary propositions and the propositions of logic? How is the transition from one to the other made? What is the nature of the transition? A material proposition of the form aRb represents a particular situation because of the arbitrary correlation of the names that occur in it with particular objects (for these purposes ' R ' counts as a name). The propositions of logic are propositions in which all the constants, except the logical constants, have been replaced by variables. Is it correct to think of this process, by which we move from elementary propositions to the propositions of logic, as a process of generalization? Wittgenstein now begins to look more closely at the contrast between the propositions of logic and generalized material propositions. Making the contrast more perspicuous shows, he believes, that we cannot see logical propositions as arrived at through a process of generalization from elementary propositions. He begins by making the following reflection concerning the propositions of logic:

In the proposition we—so to speak—arrange things *experimentally* as they do *not* have to be in reality; but we cannot make any *unlogical* arrangement, for in order to do that we should have to be able to get outside logic *in* language.—But if the quite general propositions contain *only* “logical constants”, then it cannot be anything more to us than—simply—a logical structure, and cannot do anything more than show us its own logical properties.—If there are quite general propositions—what do we arrange experimentally in them? (*NB*, p.13)

Logic is internal to the expression of propositions, the essence of all thought insofar as it aims at truth. An “illogical” arrangement of signs does not express a sense; it is simply nonsense. We cannot ‘get outside logic in language’. Thus, the quite general propositions of logic, in which all constants have been replaced by variables, cannot be considered as representing anything. These propositions cannot do more than exhibit the logical properties that are common to all propositions with sense. If we take the class of ‘quite general propositions’ to constitute the class of logical propositions, then, Wittgenstein believes, it is clear that in these propositions representational relations to the world have been cut to the point where ‘finally the completely general proposition is quite isolated’ (*NB*, p.13). If these propositions are held to arrange things experimentally, then we should have to say that ‘such propositions were experimental arrangements of “logical constants”(!)’ (*NB*, p.13). The exclamation mark shows that Wittgenstein thinks that this idea is absurd. We must recognize that these propositions no longer arrange anything ‘*experimentally*, as they do *not* have to be in reality’. These propositions no longer represent a situation, or express a sense, but rather they put the logical structure of propositions on show. These propositions have dematerialized, and we can see this from the fact that *p* \vee *p* follows from all propositions.

Wittgenstein now observes that there is another class of completely general propositions whose members are not logical propositions, but genuine material propositions that describe the world either correctly or incorrectly. Thus, we can see not only that the propositions of logic are not completely general *propositions*, but that there are completely general propositions and that they are not propositions of logic. Thus, Wittgenstein notes that it is possible to give a completely general description of the world, that is, a description that contains only variables and logical constants:

Yes, the world could be completely described by completely general propositions, and hence without using any sort of names or other denoting signs. And in order to arrive at ordinary language one would only need to introduce names, etc. by saying,

after an “ $(\exists x)$ ”, “and this x is A ” and so on. Thus it is possible to devise a picture of the world without saying what is a representation of what. (*NB*, p.14; cf. *TLP* 5.526)

He gives the following example of such a description:

Let us suppose, e.g., that the world consisted of the things A and B and the property F , and that $F(A)$ were the case and not $F(B)$. This world could also be described by means of the following propositions:

$$(\exists x, y).((\exists \varphi). \neg (x = y) \& (\varphi x. \neg \varphi y) \& (\varphi u \& \varphi z \rightarrow u = z))$$

$$(\exists \varphi).(\psi)\varphi = \psi$$

$$(\exists x, y)(z).z = xvz = y$$

And he concludes:

From all this, of course, it follows that *there are completely general propositions*. (*NB*, p.14)

It is also clear, of course, that none of these propositions is a proposition of logic. They might be characterized as ‘maximally general truths’, in the sense that they do not assert anything about any particular thing, but this does not give them the status of logical propositions. They are not a priori and their generality is an ‘accidental generality. It deals with all things that chance to be. And that is why it is a material proposition’ (*NB*, p.17). A completely generalized proposition that is arrived at through a process of generalization has not cut its representational links to reality:

The possibility of inferring completely general propositions from material propositions—the fact that the former are capable of standing in *meaningful* internal relations with the latter—shows that the completely general propositions are logical constructions from situations. (*NB*, p.16)

Whether I assert something of a particular thing or of all things that there are, the assertion is equally material. (*NB*, p.17)

There is, therefore, a logical distinction between what may properly be called completely general *propositions* and the dematerialized propositions of logic. Wittgenstein believes that this shows that the process by which we arrive at the latter cannot be one of generalization, as he previously thought. The dematerialization that characterizes the propositions of logic has not yet been made perspicuous:

If the completely generalized proposition is not completely dematerialized, then a proposition does not get dematerialized at all through generalization, as I used to think. (*NB*, p.17)

Completely generalized propositions are still propositions with sense. They do not tell us which elementary propositions are true and which are false, but they impose an empirical limit on what the range or pattern of truth and falsity across the totality of propositions can be. Thus, in Wittgenstein's example, the first of the general propositions does not tell us what property ϕ is, or which object has the property and which lacks it, but it does tell us that there are two objects and there is a property such that one object has it and the other lacks it. Wittgenstein makes the point as follows:

What the completely general propositions describe are indeed in a certain sense structural properties of the world. Nevertheless these propositions can still be true or false. According as they *make sense* the world still has a permanent range.

In the end the truth or falsehood of *every* proposition makes some difference to the general *structure* of the world. And the range which is left to its structure by the TOTALITY of all elementary propositions is just the one that is bounded by the completely general propositions. (*NB*, p.20; cf. *TLP* 5.5262)

The next day, Wittgenstein makes an implicit contrast with the limit set by logic:

In order for a proposition to be true it must first and foremost be *capable* of truth, and that is all that concerns logic. (*NB*, p.20)

Logic is not concerned with what is true, or with limiting the range left open to the world, but with what is essential before any proposition can be compared with reality for truth or falsity, that is, with what is essential to representation as such. What this shows, Wittgenstein believes, is that '[t]he logic of the world is prior to all truth and falsehood' (*NB*, p.14). The problem is to make perspicuous the difference in the relation that holds between completely general material propositions and elementary propositions, on the one hand, and between elementary propositions and the propositions of logic, on the other. Both the universalist conception of logic, and Wittgenstein's earlier conception of the propositions of logic as generalizations of tautologies, which can be understood to express a general sense, fail to make this difference clear. They fail, that is, in the task that Wittgenstein sets himself in 'Notes on Logic': '[to give] the logical propositions . . . a unique position as against all other propositions'.

5. Another worry Wittgenstein raises for the idea that the propositions of logic express substantive, maximally general truths concerns what he sees as its inevitable reliance on a notion of self-evidence. It is clear that Frege does

regard the basic logical laws as having the property of being self-evidently true. It is also clear that he understands this notion of self-evidence non-psychologically; it describes an intrinsic property of the basic truths: they provide their own rational support. Frege writes: 'The assertion of a thought which contradicts a logical law can indeed appear, if not nonsensical, then at least absurd; for the truth of a logical law is immediately evident of itself, from the sense of its expression' (Frege, 1984, p.405). Tyler Burge sums up Frege's view of self-evidence as follows:

When Frege writes, "... it is part of the concept of an axiom that it can be recognized as true independently of other truths" (Frege, 1979, p.168), he means that the truth can be rationally and correctly recognized as true by a rational mind independently of resting the rationality of this recognition on derivation of the truth from other recognized truths. (Burge, 1998, p.339)

Thus, the axioms of Frege's system, insofar as they are self-evident, do not stand in need of proof: they are justified in themselves without the need of proof. The informal elucidations of the axioms, which Frege gives in both *Begriffsschrift* and *The Basic Laws of Arithmetic*, are not to be understood as providing justification of a basic law, but as enabling the reader to recognize its status as self-evident. Frege makes the status of the axioms clear as follows:

The axioms are truths as are the theorems, but they are truths for which no proof can be given in our system, and for which no proof is needed. It follows from this that there are no false axioms, and that we cannot accept a thought as an axiom if we are in doubt about its truth; for it is either false and hence not an axiom, or it *is* true but stands in need of proof and hence is not an axiom. (Frege, 1979, p.205)

However, although it is the case that Frege holds that the axioms of his system are self-evident, he does not, contrary to Wittgenstein's suggestion in *TLP* 6.1271, attempt to justify his own logical system by appeal to a notion of self-evidence. Self-evidence is, as we've just seen, an objective feature of basic logical truths. There is nothing in Frege's understanding of this concept that suggests that we are infallible in our capacity to recognize a proposition as self-evident. Burge characterizes Frege's fallibilism as follows:

He thought (a) that the fact that a mathematical or logical proposition is found obvious by competent professionals at a given time provides no infallible guarantee that it is true, much less a basic truth. He thought (b) that there is no guarantee that true mathematical or logical principles (including basic truths) will be found to be obvious by competent professionals at a given time. (Burge, 1998, p.328)

Thus, Frege himself recognizes the intrinsic difficulties in appealing to the self-evidence of the axioms as a way of justifying a system of logical laws. As Burge puts it: 'he clearly recognized that common mathematical beliefs about what is self-evident or intuitive or obvious could be flat out mistaken' (Burge, 1998, p.328). When it comes to justifying his logical system, we find Frege appealing to purely pragmatic considerations: it is the power and fruitfulness of his system as a whole, including its anti-psychologistic and universalist assumptions, that gives us reason to accept it. For 'it is *prima facie* improbable that such a structure could be erected on a base that was uncertain or defective' (Frege, 1964, p.25).

By contrast, Russell's appeal to the notion of self-evidence is quite uncritical. Russell uses the notion of self-evidence quite generally to describe our immediate knowledge of logical laws, of propositions describing the immediate data of sense and of some ethical principles:

Our immediate knowledge of *truths* may be called *intuitive* knowledge, and the truths so known may be called *self-evident* truths. Among such truths are included those which merely state what is given in sense, and also certain abstract logical and mathematical principles and (though with less certainty) some ethical propositions. (Russell, 1980, p.63)

It is clear from this that Russell understands self-evidence differently from Frege: he equates self-evidence with our recognizing a proposition as certain. Russell acknowledges that, in certain circumstances, a proposition that we take to be self-evident may turn out to be false, for example, certain ethical propositions and fallacious memories. He responds to the problem by introducing the idea of 'degrees of self-evidence'. A proposition may, he suggests, 'have some degree of self-evidence without being true' (Russell, 1980, p.68). This makes it probable, he argues, that there are in fact two different notions of self-evidence, and 'that one of them, which corresponds to the highest degree of self-evidence, is really an infallible guarantee of truth, while the other, which corresponds to all the other degrees, does not give an infallible guarantee, but only a greater or lesser presumption' (Russell, 1980, p.68). Russell assigns the simple truths of logic and mathematics to the highest degree of self-evidence and holds that they 'may be taken as quite certain' (Russell, 1980, p.81).

Wittgenstein believes that the problem with any account of logic that treats the propositions of logic as substantial truths, in the way that Frege and Russell do, is that it is forced to rely on a notion of self-evidence to explain our a priori knowledge of their truth. And the problem with any appeal to a notion

of self-evidence as a justification for acknowledging a proposition as true is that the truth of a proposition does not follow from its seeming to us to be self-evident:

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

Frege's non-psychologistic understanding of the notion of self-evidence, which tries to make sense of the idea that the basic laws of logic are self-justifying, does not allow him to escape the difficulty. Thus, Frege himself is forced to acknowledge that we are not infallible in recognizing self-evident truths. There is, moreover, the general difficulty of explaining how a proposition with a substantive content could be such as to guarantee its own truth. It is, Wittgenstein believes, only if we can dispense with the notion of self-evidence completely that the problems of human fallibility and of understanding how a proposition can guarantee its own truth will evaporate.

Wittgenstein's dissatisfaction with the notion of self-evidence is at least part of what is expressed in the opening remark of the *Notebooks*: 'Logic must take care of itself' (*NB*, p.2). He repeats the remark a number of times in the *Notebooks*, and it is a remark that survives unaltered in the *Tractatus* (*TLP* 5.473). Thus, the framework assumption that Wittgenstein shares with Frege and Russell leads, in his case, not to the idea of a science of logic and a reliance on self-evidence, but to the idea that 'logic must take care of itself'. If logic is, as the framework assumption has it, the essential framework of all thought insofar as it aims at truth, then if we express judgements that are true or false, the whole of logic is already in place. For Wittgenstein, this shows that logic cannot itself be something substantial, that is, something for which the question of truth or falsity arises: 'logic must take care of itself'. We must not have to worry about logic. For Wittgenstein this means coming to recognize that the question of truth does not arise for the propositions of logic: 'It must in a certain sense be impossible for us to go wrong in logic' (*NB*, p.2); 'In a certain sense, we cannot make mistakes in logic' (*TLP* 5.473). That is, it depends upon our rejecting the universalist conception of logical propositions as maximally general truths; the universalist conception of logic, Wittgenstein believes, betrays the framework intuition that it was intended to ground.

However, this may seem to avoid one problem only to give rise to another. If dispensing with the notion of self-evidence means dispensing with the notion of truth in connection with the propositions of logic, then how are we to avoid the psychologism which Frege believes to be the inevitable consequence

of rejecting the objectivity of logical laws? Wittgenstein explicitly recognizes the danger as follows:

Does not my study of sign language correspond to the study of the processes of thought, which philosophers have always taken as so essential for philosophy of logic?—Only they always got involved in inessential psychological investigations, and there is an analogous danger with my method too. (*NB*, p.28; cf. *TLP* 4.1121)

The problem, he believes, is to avoid both an objectivist view of the laws of logic, with its inevitable and unsatisfactory appeal to a notion of self-evidence, and psychologism.

6. Wittgenstein's thoughts about self-evidence are closely related to the following objection to the idea that the propositions of logic are maximally objective truths:

It is clear that we can form all the completely general propositions that are possible at all as soon as we are merely given a *language*. And that is why it is scarcely credible that such connexions of signs should really say anything about the world. (*NB*, p.12)

The universalist conception holds that the laws of logic are distinguished from the laws of the special sciences only by their absolute generality. Wittgenstein sees this idea as in tension with the relation between the propositions of logic and a language in which it is possible to express thoughts about the world. A language in which we can express propositions with sense—i.e. propositions with true–false poles—is necessarily a language which already possesses the logical order that is essential to all thought insofar as it aims at truth. And with this logical order, the propositions of logic are already given. As Wittgenstein remarks: 'We can say: The completely general propositions can all be formed a priori' (*NB*, p.12); 'If we know the logical syntax of any sign-language, then we have already been given all the propositions of logic' (*TLP* 6.124). This in itself, he believes, is enough to make us suspicious of the view that these propositions have the status of objective laws, on a par with the laws of physics. Yet Wittgenstein recognizes that it is also the case that logic is essentially applied in propositions with sense: 'Logic is interested only in reality' (*NB*, p.9). The problem is to understand how logic can be both a priori and be applied to the world; to understand how logic can be both a priori and essentially embedded in a language that is used to say what is the case: 'this gradual transition from the elementary propositions to the completely general one' (*NB*, p.12). The trouble with the universalist conception, Wittgenstein believes, is that by trying to account for the applicability of logic in terms of its

objective truth, it fails to make perspicuous the a priori status of the propositions of logic, that is, how it is that the whole of logic is already given with a language in which we express thoughts about the world.

Implicit in Frege's and Russell's conceptions of their logical systems is the idea that we begin by identifying the basic indefinables and the basic, unprovable laws on the basis of which the whole of logic (including arithmetic) can be constructed. Wittgenstein shares Frege and Russell's conception of logic as an a priori limit of thought. However, as we've just seen, he rejects their universalist interpretation of logic as a system of maximally general truths that ground inferences from one proposition to another. Wittgenstein's objections to Frege and Russell's handling of the logical primitives may be seen as just another way of bringing out what he sees as the fundamental deficiency of their philosophy of logic: its failure to make perspicuous the unique, a priori status of logic. Logic is given as soon as a language in which we express judgements about the world is given; it is, in some sense, already complete or entire when we have a language that we use to say how things are. Frege and Russell's treatment of logic as a body of doctrine, Wittgenstein believes, fails to make clear that by acquiring a language in which we express thoughts that are true or false, we have already grasped the whole of logic. Thus, '(All logical constants are already contained in the elementary propositions)' (*NB*, p.27); 'It is clear that whatever we can say *in advance* about the form of all propositions, we must be able to say *all at once*' (*TLP* 5.47); 'There can be no surprises in logic' (*TLP* 6.1251).

For Frege and Russell the propositions of logic are a priori in this sense: they comprise all the propositions that can be derived as theorems, via the rules of inference, from the axioms of their systems. However, given Wittgenstein's view of the a priori status of logic, the implied distinction between primitive and derived logical truths is illusory. If logic is the essence of thought, then all of logic is given with language in which we express thoughts about reality, and the notion of derivation or proof, which Frege and Russell treat as fundamental to logic, is inessential to it. Frege and Russell, Wittgenstein believes, wrongly assimilate proof in logic to proof of one proposition with sense from other propositions with sense that have been accepted as true. As he says in the *Tractatus*: '[I]t would be altogether too remarkable if a proposition that had sense could be proved *logically* from others, and *so too* could a logical proposition. It is clear from the start that a logical proof of a proposition that has sense and a proof *in logic* must be two entirely different things' (*TLP* 6.1263). One of the aims of Wittgenstein's task of clarification is to make clear this distinction between a so-called proof in logic and the proof of a proposition

with sense. The trouble with Frege and Russell's conception of logic as substantive maximally general truths, and the idea of primitive and derived laws that goes with it, is that it does not make this distinction between a proof in logic and a logical proof perspicuous.

The conception of logic as in some sense already complete, imposes, Wittgenstein believes, certain conditions on what constitutes the genuine logical primitives. As we shall see, he believes that these conditions are met by the general form of a proposition. However, this idea of the one logical primitive depends upon Wittgenstein's identification of the class of logical propositions with all the tautologies, that is, with all those propositions that are constructed from their elements in such a way that the resulting proposition is true come what may. The difference between Wittgenstein's concerns and those of Frege and Russell is perhaps nowhere more evident than in his taking the general form of a proposition as the one logical primitive. It is also the clearest sign that he is dealing with a language 'more primitive than ours'. I indicated in Chapter 1 that I believe that this is not incompatible with his achieving insights that are fundamental to his later philosophy of language. For the moment, however, it is important to note that the general form of a proposition, that is, the one logical primitive, is not itself a proposition, and the propositions of logic are not deduced from it. Rather, the general form of a proposition is a variable that expresses what all propositions have in common. It is equivalent to a rule for the construction of all propositions; all propositions are values of this variable. The tautologies, which Wittgenstein identifies with the propositions of logic, are seen to have a unique status among the propositions that are the values of general form of a proposition. It is this that identifies them as logical propositions. Wittgenstein believes that in recognizing this both the nature of logical propositions and the relation between the propositions of logic and elementary propositions are at last made perspicuous. Wittgenstein's way out of the difficulties, which he believes the universalist conception and the notion of logical substantives gives rise to, leads him to abandon the idea of logical indefinables completely and to recognize that 'an indefinable simple symbol can only be a name' (NL, p.107).

Let's look, then, at Wittgenstein's objections to the idea that the logical constants represent logical indefinables. First of all, as we saw in the previous chapter, 'or', 'not', 'if . . . then' cannot be functions and relations 'because propositions, owing to sense, cannot have predicates and relations' (NL, p.99). For the same reason, the content of a molecular proposition must, in general,

be nothing over and above the content of its atomic constituents, that is, the logical constants must not introduce anything new into a proposition. This is enough on its own to cast doubt on Frege and Russell's treatment of the logical constants. However, Wittgenstein also has a number of further objections. The true indefinables of logic, he argues, would, as indefinables, have to be independent of one another. The inter-definability of the logical constants—the fact that it is arbitrary which we choose as primitive and which are defined—'shows, of itself, that these are not the right indefinables, and even more conclusively, that they do not denote relations' (NL, p.101). Moreover, given that logic is a system, if an indefinable is introduced, it must be introduced in all combinations in which it can occur. This condition is not met if the sign for generality is treated, in the way that Frege and Russell treat it, as a quantifier that takes a propositional function as argument. In this case, the sign for generality is understood as a new sign for the construction of propositions out of expressions that stand for functions, that is, expressions of the form xRx . But, Wittgenstein argues, xRx has hitherto been introduced only in connection with propositions of the form aRb , and it is not clear how we are to understand it in the new context: $(\exists x)xRx$ (see NL, p.105). Thus, 'if the form xRy has been introduced it must henceforth be understood in propositions of the form aRb just in the same way as in propositions as $(\exists x, y).xRy$ and others' (NL, p.105). As we'll see in Chapter 10, this leads Wittgenstein to a completely different treatment of general propositions from that of Frege and Russell; unlike them, he does not treat $(\exists x) \dots x$ as a logical primitive.

7. The final objection I want to look at concerns Wittgenstein's criticisms of Frege's and Russell's conceptions of the relation between our inferential practice and what Wittgenstein calls their 'laws of deduction' or 'laws of inference' (NL, p.100; *TLP* 5.132). Both Frege and Russell regard our practice of deriving a concrete conclusion from concrete premises as grounded in the laws of logic, conceived as substantive, maximally general truths. The movement from premises to conclusion is taken to be justified insofar as it is made, according to the mode of inference recognized as purely logical, from premises which have either been recognized as true or which are substitution instances of an objective logical law. Take, for example, the following inference:

- (1) All whales are mammals.
- (2) All mammals are vertebrates.
- (3) Therefore, all whales are vertebrates.

On Frege and Russell's view, this inference is justified insofar as its conclusion can be derived by logical rules of inference from logical laws and judgements that have already been asserted to be true. To make clear that this is so, the inference can be rewritten in canonical form as follows:

- (1') $((\forall x)(x \text{ is a whale} \rightarrow x \text{ is a mammal}) \& (\forall x)(x \text{ is a mammal} \rightarrow x \text{ is a vertebrate})) \rightarrow (\forall x)(x \text{ is a whale} \rightarrow x \text{ is a vertebrate})$ [substitution instance of the logical law $((\forall x)(Fx \rightarrow Gx) \& (\forall x)(Gx \rightarrow Hx)) \rightarrow (\forall x)(Fx \rightarrow Hx)$]
- (2') $(\forall x)(x \text{ is a whale} \rightarrow x \text{ is a mammal}) \& (\forall x)(x \text{ is a mammal} \rightarrow x \text{ is a vertebrate})$ [premises (1) and (2)]
- (3') Therefore, $(\forall x)(x \text{ is a whale} \rightarrow x \text{ is a vertebrate})$ [modus ponens, (1'), (2)']

The proof of (3) on the basis of (1) and (2) can now be seen to be constructed in accordance with the laws of logic. It is this, according to Frege and Russell, that grounds the fact that (3) can be justified on the basis of (1) and (2). Thus, according to Frege: 'The task of logic is to set up laws according to which a judgement is justified by others, irrespective of whether these are themselves true' (Frege, 1979, p.175). Russell makes the same point as follows:

It is noteworthy that, in all actual valid deduction, whether or not the material is of a purely logical nature, the relation of premises to conclusion, in virtue of which we make the deduction, is one of those contemplated by the laws of logic or deducible from them. (Russell, 1905/1994, p.517; quoted in Proops, 2002)

Wittgenstein's objection to the idea that the validity of an inference, such as that represented in (1)–(3), is grounded in 'laws of inference' is first expressed, in 'Notes on Logic', as follows:

Logical inferences can, it is true, be made in accordance with Frege's or Russell's laws of deduction, but this cannot justify the inference; and therefore they are not primitive propositions of logic. If p follows from q, it can also be inferred from q, and the "manner of deduction" is indifferent. (NL, p.100)

We can, of course, rewrite the proof given in (1)–(3) in the form (1')–(3'). However, Wittgenstein argues, it is not because of this that the inference from (1) and (2) to (3) is justified. The inference from (1) and (2) to (3) is justified, he suggests, by the relation that the propositions expressed bear to one another, and does not depend on anything outside that. The inference from (1') and (2') to (3') is just another way of expressing the argument represented

in (1)–(3); it is not a justification of it. This shows, Wittgenstein believes, that Russell misrepresents the status of his laws of inference. Russell takes his 'laws of inference' to be maximally general truths that characterize the relation of one proposition to another; deductions are valid insofar as they are covered by these general laws; the general laws are the primitive propositions of logic on which all actual valid deductions depend. Given, however, that the inference from (1) and (2) to (3) is justified by the relation that these propositions bear to one another, this conception of the laws of inference must be mistaken: the 'law of inference' plays no essential role in justifying the transition from (1) and (2) to (3). Including a substitution instance of the relevant logical law as a premise in the argument adds absolutely nothing to our deduction of (3) from (1) and (2).

Wittgenstein spells these objections out more carefully in the *Tractatus*:

If the truth of one proposition follows from the truth of others, this finds expression in relations in which the forms of the proposition stand to one another: nor is it necessary for us to set up these relations between them by combining them with one another in a single proposition; on the contrary, the relations are internal, and their existence is an immediate result of the existence of the propositions. (*TLP* 5.131)

The problem, for Wittgenstein, is to make the relation between propositions perspicuous in such a way that it becomes clear that what justifies the inference from one proposition to another can be gathered from the propositions themselves. The problem with the argument represented by (1)–(3) is that our mode of signifying does not make the relation between the propositions clear; what we need is a mode of signifying that makes the inner connection between the propositions obvious. Once the relation between the propositions is clarified or made perspicuous, we shall no longer be tempted to look outside the propositions themselves—to 'laws of inference'—as a means to ground the transition from one proposition to another. It must be made clear that the propositions themselves 'are the only possible justification of the inference' (*TLP* 5.132). Wittgenstein sums up his objection to Frege and Russell as follows:

'Laws of inference', which are supposed to justify inferences, as in the works of Frege and Russell, have no sense, and would be superfluous. (*TLP* 5.132)

They have no sense insofar as they are combinations of signs in which the representational relation to reality has been cut; they are superfluous insofar as it is the internal relation of the propositions occurring in a deduction of one concrete proposition from another that justifies the deduction.

We can now see that Wittgenstein's objection to Frege and Russell's conception of the relation between the laws of logic and actual inferences is, at bottom, a repetition of his fundamental objection to the universalist conception of logic. There are no indefinable logical relations whose interconnections are expressed in substantial laws of the form $(Ap)(Aq)(p \& q) \rightarrow p$. The inference from 'Socrates is bald and Socrates is snub-nosed' to 'Socrates is snub-nosed' does not go via, or in any way depend upon, a law that connects propositions of the form $p \& q$ with propositions of the form p . To suppose that it does is, first of all, to treat the logical constants as indefinables, that is, as substantive expressions equivalent to functions and relations. Secondly, it is to treat the so-called laws of logic as substantive, general propositions that express laws of truth that are authoritative for correct reasoning, and which we must think in accordance with if we are to think truly. And to suppose all this is to fail to see clearly the nature of the connection between the propositions of logic and propositions with sense. It is, in particular, to fail to see that logic is internal to the expression of propositions with sense. To come to see the nature of a proposition clearly is to come to see the essence of a proposition—i.e. logic—clearly. It is also to make clear both how one proposition occurs in another and the nature of the relation between propositions that enables us to infer one from the other. Thus, all the problems that we've looked at in the end bring Wittgenstein back to his one fundamental problem: What is the nature of the proposition? Or: How does a proposition express its sense? The problem of understanding the nature and status of the propositions of logic, or the nature of inference, are just aspects of this single great problem.

4

Pictures

1. In Chapter 1, I suggested that one of the main interpretative challenges of Wittgenstein's work is to understand how he could have taken himself to be engaged in a project of clarification in both the *Tractatus* and the *Philosophical Investigations*. How can these two works, which are so contrasting in style, both be understood as following an anti-theoretical brief? The pressure to accept that in his early work Wittgenstein, despite himself, falls into putting forward a substantial philosophical doctrine that explains how language is tied to reality may seem overwhelming. Cora Diamond and James Conant have argued that to give in to this pressure is to fail to understand Wittgenstein's philosophical purpose. They argue that Wittgenstein's ultimate aim is to overcome the apparently metaphysical claims about language and its relation to the world with which the work begins, by showing that we cannot give a meaning to the expressions that occur in them. Thus, the initial, seemingly substantial or theoretical, talk of facts, objects, possibilities, propositions, names, and so on, is ultimately revealed as nonsensical. However, although Wittgenstein avoids explicit theorizing about the relation between language and the world, Diamond and Conant argue that he succumbs to a form of metaphysical dogmatism by imposing constraints on how the post-Tractarian work of clarifying what we say is to be carried out.

According to Diamond and Conant, the dogmatism into which Wittgenstein falls in his early work takes the form of a commitment to the general logical character of all thought, which is expressed in his conviction that all the propositions of ordinary language can be analysed into truth-functions of elementary propositions, which are themselves concatenations of simple names. The legacy of the philosophy of logic he sets out to reject remains in the form of an adherence to a general approach to philosophical problems, which preserves its logical prejudices concerning the nature of propositions and our modes of inference. In the chapters that follow, I want to present an alternative way to resist the pressure to interpret the *Tractatus* as presenting

a theory of the relation between language and the world, one which permits us to acknowledge that Wittgenstein's aim is to achieve real philosophical insight into how language functions. Wittgenstein's anti-theoretical approach to philosophy amounts to a conviction that these insights are achieved by allowing language itself to make clear how it signifies. The dogmatism of the *Tractatus* lies in the fact that this task of laying bare the workings of language is undertaken within the framework of a number of preconceptions. As we saw in Chapter 1, these preconceptions are expressed, not only in Wittgenstein's commitment to the possibility of a logically perspicuous representation of the sense of ordinary propositions, but in the very form that the problem of the nature of a proposition has for him. Wittgenstein approaches his central task of clarification within the framework of a primitive idea of the essence of language and a naive conception of meaning. Yet I want to argue that, even though this is the case, we can still understand why he takes his approach to his task to be one of clarification.

2. Wittgenstein's conception of the aims of his central task of clarification emerges out of his articulation of what he believes to be the fundamental problems in the work of Frege and Russell. Wittgenstein's critical engagement with this work, as we've just seen, occurs against a background of a shared commitment to a conception of logic as the essential framework to the employment of language to express judgements about the world, that is, of logic as the essence of all thought insofar as it aims at truth. For Wittgenstein, the idea that logic is the essential framework to all thought goes along with the idea that there is a perfect logical order in the propositions of ordinary language: where there is sense (propositions with true–false poles), there is logic; and where there is logic, there must be perfect logical order. These ideas do not, for Wittgenstein, have the status of theoretical claims, that is to say, he does not put them forward as hypotheses that explain how our language works. They rather have the status of preconceptions of how a language in which thoughts are expressed must be. These preconceptions colour Wittgenstein's idea of his fundamental task and determine how he undertakes the work of clarification that he believes it calls for. It is only within the context of this idealized picture of a proposition and of logic that Wittgenstein could conceive the central task of clarification in the way that he does.

Within the context of his idealized picture of logic and a proposition, the problem Wittgenstein takes himself to confront divides into the following aspects, although, as we've just seen, one aspect can be clarified only if they

all are. He must make perspicuous the universal and a priori status of logic. He must show how logic takes care of itself; how language itself prevents any logical mistake. For Wittgenstein, this means making clear that the question of truth does not arise for the logic of our language, that logic is prior to truth and falsity. He must make clear that we have all the propositions of logic as soon as we have a language in which we express judgements about the world. He must make clear how a proposition expresses its sense and he must make perspicuous the connection between propositions with sense and the propositions of logic. He must make clear the logical distinction between names and propositions and he must show how names combine in propositions with sense. Finally, he must make clear how one proposition occurs in another and how the relation between propositions enables us to infer one proposition from another. This is how the problem of the nature of a proposition presents itself to Wittgenstein when he undertakes his task of clarification. He is convinced that the clarification is to be achieved by means of a logical investigation of language itself: 'The way in which language symbolizes is mirrored in its use' (*NB*, p.82). However, what he does not see is that both the way the problem has presented itself and his conception of the object to which the work of clarification is addressed are completely determined by his own preconceptions concerning logic and a proposition.

Thus, although Wittgenstein conceives his task to be one of allowing language to make clear how it signifies, he undertakes it with a preconceived idea of the logical order that must be there in it. Although the intended topic of his investigation is ordinary language, his preconceived idea of its essence gets between him and the reality. He takes himself to be involved in a task of logical investigation in which language itself makes clear how it functions. He does not notice that he is operating with an idealized conception of both logic and a proposition that belongs to a primitive idea of language, or to an idea of a language more primitive than ours. The dogmatism of Wittgenstein's early philosophy lies in his mistaking what is merely his idea of a proposition and the essence of language for the thing itself. The idea of analysis is used by Wittgenstein to take up the slack between his conception of a proposition as a unique or determinate representation of a particular state of affairs and what are ordinarily called 'propositions', 'words', 'signs'. Thus, the way that language is revealed to function in the *Tractatus* is as logically determinate as Wittgenstein's conception of the essence of representation requires, but only because the work of revealing how language functions is carried out in relation

to a representation of language that already has this conception of its essence written into it.

This sleight of hand is made easier by the fact that Wittgenstein's preconception of the essence of language makes an absolute separation between what belongs to the essence of language and anything that belongs to its actual application. This separation allows him to indulge in contempt for the particular case. He believes that his logical investigation is concerned only with the essential or logical properties of any symbolism in which propositions are expressed, and that it can be carried out independently of what any particular expression means: 'Just as little as we are concerned, in logic, with the relation of a name to its meaning, just so little are we concerned with the relation of a proposition to reality' (NL, p.102). The problem of finding examples of elementary propositions, for example, is a problem for the task of the analysis of the particular propositions of ordinary language, and it need not concern him: 'How, in each case, the resolution [of a statement about complexes into a statement about the constituents] is to be made, is an important question, but its answer is not unconditionally necessary for the construction of logic' (NL, p.101). What Wittgenstein is interested in is the question of how *any* elementary proposition expresses its sense, in the logical order that is essential to *any* system of representation, and not in the sense that the arbitrary conventions of language have assigned to particular expressions. Thus, his preconceptions concerning a proposition and the essence of language do not only encourage the central deception of the *Tractatus* but they allow it to prosper. They allow Wittgenstein to persuade himself that the details of our actual employment of language on specific occasions to say things are irrelevant to his interests.

The claim is, therefore, that the dogmatism of the *Tractatus* affects both the form of Wittgenstein's enquiry and his conception of the object on which it is directed. Wittgenstein can be seen as 'setting out to establish an order in our use of language' (*PI* 132), but the order he uncovers is an idealized order that reflects his own preconceptions of the nature of a proposition and the essence of language. On this view, despite his dogmatism, Wittgenstein's investigation is properly conceived as a clarificatory or logical investigation of language, but the object on which it is directed is an idealized one. This interpretative approach follows in the anti-metaphysical tradition of Rhees and others, insofar as it rejects the idea that the *Tractatus* puts forward 'a general view of the structure of the world, language, and thought, including their relations to each other' (Hintikka, 2000, p.12). There is, on the

interpretation to be developed here, no attempt in the *Tractatus* to get outside language and explain how it hooks up with the world. The idea that the work does engage in this more substantial form of philosophical theorizing is clearly encouraged by the remarks with which the work opens, in which Wittgenstein appears to characterize his fundamental ontology. Diamond and Conant argue that these remarks are to be understood ironically: they are to be understood as giving voice to a temptation to say something about the relation between language and the world. As we've seen, they argue that the remarks are ultimately shown to be the first stage in a journey of self-discovery, one in which we are gradually brought to realize that the sentences that we initially found ourselves wanting to affirm really mean nothing. If the book works, they believe, we come to see that we cannot give any satisfactory meaning to the signs that occur in the remarks with which the work begins.

I share Diamond and Conant's concern to interpret the opening remarks of the *Tractatus* in a way that allows us to see how Wittgenstein could have conceived of them as part of a project of clarification that is concerned only with what language itself makes clear. And I agree with their implicit suggestion that it is only when we approach these opening remarks from the perspective of an insight into the aims of the work as a whole that we have any hope of understanding them correctly. In the end, I want to argue that these remarks do not, despite appearances, involve any substantial—i.e. hypothetical—claim about language and its relation to a transcendent world, not even an ironic one. However, before the case for such a reading can be made, we need to have a much better grip on the way that Wittgenstein's logical investigation of language unfolds. I do not, therefore, want to start my detailed interpretation of the work with a discussion of the remarks with which it begins. I will start my interpretation by looking at remarks that occur much later in the work and which provide a clearer insight into the nature of Wittgenstein's attempt to achieve a perspicuous view of how a proposition expresses its sense.¹

3. At *TLP* 4.014–4.0141, Wittgenstein writes:

A gramophone record, the musical idea, the written notes, and the sound waves, all stand to one another in the same internal relation of depicting that holds between language and the world.

They are all constructed according to a common logical pattern.

¹ There is some justification for this approach, insofar as it seems likely that the opening remarks of the *Tractatus* were some of the last to be written.

(Like the two youths in the fairy-tale, their two horses, and their two lilies. They are all in a certain sense one.)

There is a general rule by means of which the musician can obtain the symphony from the score, and which makes it possible to derive the symphony from the groove on the gramophone record, and, using the first rule, to derive the score again. That is what constitutes the inner similarity between these things which seem to be constructed in such entirely different ways. And that rule is the law of projection which projects the symphony into the language of musical notation. It is the rule for translating this language into the language of gramophone records.

Wittgenstein first uses the notion of an internal relation in 'Notes Dictated to Moore', and it is an idea that he employs throughout his later philosophy. In the *Tractatus*, the idea of an internal relation, as we shall see, lies at the heart of his attempt to escape from what he sees as the confusions of Frege and Russell. His central task is to make perspicuous how a proposition expresses its sense. What this task amounts to is to become clear about the nature of the 'internal relation of depicting' that holds between language and the world.

The comparison that Wittgenstein employs at *TLP* 4.014 may be seen as an attempt to clarify what is involved in the idea of an internal relation. The comparison with the musical score, the musical idea, the music, and the gramophone record is intended to help us see what it is that Wittgenstein is drawing our attention to in saying that language stands in an internal relation of depicting to the world. On the one hand, we see that these four things—the score, the thought of the music, the musical sounds, and the gramophone record—are different; we can separate them in thought and focus on each of them individually. On the other, we can recognize that there is an essential link between them insofar as, given any one of them, we can derive the others from it by means of 'a law of projection'. The link between the items does not consist in a hypothetical connection between any one of them and something outside it; the items are not linked merely hypothetically or externally. Rather, the link is grounded in a rule that enables us to derive one from the other, that is, we can construct one from the other on the basis of a rule. Thus, the link between the items is not one that we discover to hold, but is rather grasped by means of a rule of derivation or projection. The link between the items is internal insofar as it is made, in each case, via a rule of projection that enables us, given any one of them, to construct the others from it. Wittgenstein suggests that we might think of this rule of projection as equivalent to a rule for translating from one language to another. That is to say,

we can see the musical score, the musical idea, the music, and the gramophone record as mutually translatable languages.

How does this analogy help us to understand the ‘internal relation of depicting that holds between language and the world’? How can we see the relation between language and the world as equivalent to a rule for translating between languages? Clearly, we cannot do so if we think of the world as something that lies outside language, as something set over and against it, something that language hooks up with in virtue of an external relation. An external relation is a relation between two items that can be conceived independently of one another; an external relation is in its nature a matter of discovery or hypothesis. Thus, the idea that the relation of depicting that holds between language and the world depends upon a linguistic sign’s standing in an external relation to something that can be conceived as independent of language, or to something that is not essentially linked with language, must, Wittgenstein claims, be recognized as an illusion. The relation between language and the world that it depicts is not a hypothetical relation between items that we grasp independently of one another. Rather, the relation between language and the world, between a propositional sign and the state of affairs that it represents, is essential or internal; it is a relation that is constituted by the rules of projection in virtue of which we use language—i.e. a propositional sign—to say how things are in reality. Thus, although we see the items as separate—the propositional sign, ‘ p ’, is distinct from the fact that p —we also recognize them as internally linked, insofar as we use the propositional sign, ‘ p ’, to represent the fact that p is the case. Thus, a propositional sign can be used to represent a fact, and any fact can be represented by means of a propositional sign. The relation between the propositional sign and the fact that it can be used to represent does not depend upon a correlation between two items, but upon a rule that enables us to construct one from the other. We come to see the relation between language and the world it represents more clearly, not by discovering something, but by clarifying the rules of projection in virtue of which we use propositional signs to say how things are in reality.

Thus, Wittgenstein’s claim is that the relation of depicting that holds between language and the world does not depend upon a hypothetical link between linguistic signs and something outside language, which is in its nature a matter of discovery. Rather, it depends upon the existence of a rule of projection whereby we can derive one thing (a representation of a possible state of affairs) from another (a propositional sign). The internal

relation of depicting which holds between language and the world, consists in the fact that to understand a proposition is to know how things stand in reality if the proposition is true. The rule of projection that constitutes the internal relation between language and the world it depicts is the rule whereby we determine, on the basis of the constituents of a propositional sign and how they are put together, the situation that it represents, that is to say, the circumstances in which the proposition it expresses is true and the circumstances in which it is false. It is in virtue of this rule of projection that a propositional sign expresses a proposition that represents a possible state of affairs; it is in virtue of this rule of projection that we can derive knowledge of what is the case from knowledge that a given proposition is true. The logical investigation of how a proposition expresses its sense is the investigation of the internal relation between a proposition and the situation that it represents, that is, of the rules of projection in virtue of which a propositional sign can be compared with reality for truth or falsity. There must, Wittgenstein believes, be no attempt to explain how language's ability to represent the world came about; the internal relation of depicting that holds between language and the world is the starting point for our investigation. The aim of the investigation is to make the internal relation—i.e. the rules of projection in virtue of which a propositional sign represents a possible state of affairs—perspicuous.²

4. Wittgenstein's investigation of how a proposition expresses its sense, represents a particular possible state of affairs, begins with an investigation of elementary propositions. One of the main sources of Wittgenstein's dissatisfaction with the work of Frege and Russell lay in what he saw as their failure to make the nature of a proposition perspicuous. What emerges from his detailed criticisms of their philosophy of logic is a more detailed understanding of what he takes to be involved in this work of clarification. Focusing first on elementary propositions, he must make perspicuous the essential

² The concept of an internal relation is central to the interpretation of the *Tractatus* that I'm going to present. In line with the anti-metaphysical approach I take to the work, the concept of an internal property or relation is not to be understood metaphysically, which gives priority to the idea of an essential property of what is signified by a sign, or a necessary relation between what signs signify. The concept of an internal property or relation is, rather, to be connected with what is essential to a symbol's symbolizing or representing in the way that it does. We can speak of the internal properties and relations of what signs signify, but these are merely a reflection of the essential properties and relations of the symbols that signify them. Thus, in investigating the internal relation of depicting that holds between language and the world, we are investigating everything that is essential to a proposition's representing a possible state of affairs, i.e. to its being the symbol that it is. It is in the nature of this investigation that it is internal to language, i.e. to the system of representation as such.

bipolarity of the proposition. He must also come to see how it is possible to understand a proposition without knowing its truth-value and without having its sense explained to us. And he must make clear how the existence of a proposition, p , guarantees that p is possible. Each of these problems is an aspect of the task of clarifying how an elementary proposition expresses its sense. Wittgenstein believes that it is by becoming clear about the internal relation between a proposition and the possible state of affairs it represents that all these aspects of the problem will be made perspicuous. However, it is also the case that Wittgenstein believes that all the problems he takes himself to confront are already implicitly dealt with in the process of making clear how an elementary proposition expresses its sense. Once the essence of the elementary proposition is made perspicuous, we shall, he believes, already have everything we need to understand the relation between elementary propositions and the propositions of logic, the nature of negation and inference, and so on. It is not, as I emphasized earlier, that we shall be able to deduce, say, the status of the propositions of logic from the nature of an elementary proposition. It is rather that in coming to see clearly into the workings of an elementary proposition we are coming to see clearly into the essence of representation, and this is all that is needed to make all of the problems disappear.

Wittgenstein first expresses the idea that a proposition's sense depends upon a rule of projection that coordinates the propositional sign with a state of affairs that it represents in 'Notes on Logic':

Let us consider symbols of the form " xRy "; to these correspond primarily pairs of objects of which one has the name " x ", the other the name " y ". The x 's and y 's stand in various relations to each other, among other relations the relation R holds between some, but not between others. I now determine the sense of " xRy " by laying down the rule: when facts behave to " xRy " so that the meaning of " x " stands in the relation R to the meaning of " y ", then I say that the [the facts] are "of like sense" ["*gleichsinnig*"] with the proposition " xRy "; otherwise "of opposite sense" ["*entgegengesetzt*"]; I correlate the facts to the symbol " xRy " by thus dividing them into those of like sense and those of opposite sense. (NL, p.104)

Thus, he comes to think of the sense of a proposition as equivalent to a rule that allows us to read off from a propositional sign, as it is used on a particular occasion, how things stand if it is true. A proposition is a propositional sign as it is used on a particular occasion to express a sense. Thus, what we are concerned with is the coordination of what he comes to call the representing fact (the propositional sign as it is used on a particular occasion, or the proposition) and the situation that it represents. Early in the *Notebooks*, he writes:

'The general concept of the proposition carries with it a quite general concept of the co-ordination of proposition and situation' (*NB*, p.7). This 'coordination' between a proposition (or propositional sign as it is used on a particular occasion) and a situation is precisely the internal connection between the proposition and the particular possible state of affairs it represents.

A proposition describes how things stand if it is true; this is what constitutes the sense of the proposition: 'We can say straight away: Instead of this proposition has such-and-such sense; this proposition represents such-and-such a situation' (*NB*, p.8; cf. *TLP* 4.031). The aim of Wittgenstein's task of clarification is that we should come to see more clearly what this coordination between a proposition and the situation to which it is internally related consists in. In 'Notes on Logic' and 'Notes Dictated to Moore', he is already thinking in terms of a correlation of the elements of a proposition with objects and the combining of these elements in a way that determines a rule for comparing the proposition with reality. In October 1914, Wittgenstein sums up this idea in the concept of logical portrayal: 'A proposition can express its sense *only* by being a logical portrayal of it' (*NB*, p.6). A proposition stands in an internal relation to a situation that it represents insofar as it is a logical picture of it; it is in virtue of its being a logical picture that we can read off from the proposition the situation that it represents. A proposition is a logical picture only insofar as it combines elements that are representatives of objects in a way that portrays how these objects are combined if the proposition is true: 'The proposition is a picture of a situation only *in so far* as it is logically articulated' (*NB*, p.8). Thus, the rule of projection in virtue of which a proposition represents a possible state of affairs presupposes that the proposition is composed from elements which are correlated with, or stand for, objects that are the constituents of the state of affairs it represents.

Wittgenstein's early insights into how a proposition expresses its sense are repeated almost word for word in the *Tractatus*. To grasp the sense of a proposition is to read off from the proposition the situation that it represents:

A proposition is a picture of reality.

A proposition is a model of reality as we imagine it. (*TLP* 4.01)

We can see this from the fact that we understand the sense of a propositional sign without having its sense explained to us. (*TLP* 4.02)

A proposition is a picture of reality: for if I understand a proposition, I know the situation that it represents. And I understand the proposition without having its sense explained to me. (*TLP* 4.021)

To understand a proposition means to know what is the case if it is true.

(One can understand it, therefore, without knowing whether it is true.)
It is understood by anyone who understands its constituents. (*TLP* 4.024)

The relation between a proposition and the situation it represents is essential or internal: it does not depend upon anything other than the rules that enable us to derive from the proposition—i.e. from these words used in this combination—a knowledge of how things stand if the proposition is true. Given the proposition, we can derive the possible state of affairs that it represents: 'It belongs to the essence of a proposition that it should be able to communicate a new sense to us' (*TLP* 4.027). A proposition can do this only insofar as it is a logical picture, that is, a logically articulate portrayal of a possible state of affairs:

A proposition must use old expressions to communicate a new sense.

A proposition communicates a situation to us, and so it must be *essentially* connected with the situation.

And the connexion is precisely that it is a logical picture.

A proposition states something only in so far as it is a picture. (*TLP* 4.03)

Thus, to clarify the nature of a proposition is to clarify the nature of logical pictures, that is, it is to make clear how a propositional sign, as it is used on a particular occasion to express a sense, constitutes a logical picture of a possible state of affairs. Insofar as the relation between a proposition and the situation it represents is an internal relation, the task of clarification is essentially independent of anything hypothetical or empirical. It is, Wittgenstein believes, in the nature of what we are investigating that our investigation does not depend on anything hypothetical. We're not concerned with a hypothetical link between items whose natures are independent of one another, but with the rules of depiction whereby we can derive, from a knowledge of a propositional sign, as it is used on a particular occasion, a knowledge of the possible state of affairs that it represents. Wittgenstein breaks this logical investigation down into two stages: first, the exploration of the logic of portrayal in connection with a quite general notion of a picture; secondly, the detailed exploration of the way in which a proposition pictures the state of affairs it represents. The remainder of this chapter will be concerned with the first of these; Chapter 5 will take up the second.

5. Wittgenstein's investigation of the logic of portrayal starts with the observation: 'We picture facts to ourselves' (*TLP* 2.1). That is to say, we have a practice of using pictures to represent what is the case, or to say how things are. This is our starting point. A picture is a picture of a fact insofar as it

represents an existing state of affairs. A picture represents a state of affairs insofar as there is a rule that lays down what counts as the represented state of affairs' existing and what counts as its not existing: 'A picture presents a situation in logical space, the existence and non-existence of states of affairs' (*TLP* 2.11). A picture divides reality into two by presenting a situation that either exists or does not exist. A picture has an essential (i.e. internal) relation with a situation that it represents and which either exists or does not exist. We can read off from the picture how things are in reality if the picture is correct: 'A picture is a model of reality' (*TLP* 2.12). A picture is logically articulate insofar as it is essentially a determinate combination of pictorial elements in a structure that represents a possible state of affairs: 'A picture is a fact' (*TLP* 2.141). It is logically articulate insofar as it is a structure in which 'elements are related to one another in a determinate way [stand to one another in a determinate way]' (*TLP* 2.14). 'The elements of the picture are the representatives of objects' (*TLP* 2.131). It is by combining elements in a determinate way that the picture represents how the objects for which the elements stand are combined if the picture is correct: 'The fact that the elements of a picture are related to one another in a determinate way [stand to one another in a determinate way] represents that things are related to one another [that things so stand to one another] in the same way' (*TLP* 2.15). Thus, the way the elements are combined in the picture determines what it is for the facts to be 'of like sense' or 'of opposite sense' with the picture; the picture represents its sense insofar as it shows what it is for the facts to be of like sense with the picture, that is, what it is for the picture to be correct.

The way the elements of a picture are combined with one another in the picture is called 'the structure of the picture' (*TLP* 2.15). The possibility of these elements being structured or combined in this way is called 'the pictorial form of the picture' (*TLP* 2.15). Thus, pictorial form may be thought of as the rules of picturing that are exhibited in the possibility for combining the elements in structures that represent possible states of affairs. Insofar as a picture has an internal relation to a state of affairs that it represents, the pictorial form of the picture—the rules that are manifest in the possibilities for combining the elements in structures that picture states of affairs—are essentially rules by which the picture as a whole is projected onto reality. Thus, the possibility for combining elements of the picture in a given structure is equivalent to the possibility for projecting the picture onto reality, that is, to the possibility for grasping the circumstances in which the picture is correct and the circumstances in which it is incorrect. The rules that constitute pictorial form

are rules whereby we can derive knowledge of how things stand in reality from knowledge that the picture is correct: 'Pictorial form is the possibility that things are related to one another in the same way as the elements of the picture' (*TLP* 2.151). Pictorial form is equivalent to the rules of projection that determine what it is for the facts to be 'of like sense' or 'of opposite sense' with the picture. If there are no rules of projection that determine the circumstances in which a picture is correct or incorrect, then there is no picture, and, *ipso facto*, no combination of pictorial elements.

Wittgenstein follows the remark just quoted (*TLP* 2.151) with the following remark:

That is how a picture is attached to reality, it reaches right out to it. (*TLP* 2.1511)

The picture reaches right out to reality insofar as it is projected onto it, that is, insofar as there are rules of projection that determine the conditions under which the picture is correct or incorrect. It is these rules of projection that constitute the internal connection between the picture and the state of affairs it represents, and which enable us to derive knowledge of how things are in reality from knowledge that the picture is correct. It is these rules of projection that enable us to compare the picture with reality, that determine what it is for the facts to be 'of like sense' or 'of opposite sense' with the picture. Wittgenstein likens this possibility for comparing a picture with reality to the practice of measuring: 'The proposition is a measure of the world' (*NB*, p.41); 'The picture is laid against reality like a measure' (*TLP* 2.1512). In measuring the length of an object, we use a measuring instrument, for example, a ruler, according to a rule. We lay the ruler against the object and the rule of measurement determines the length that we assign to it. The result is that we can state how long the object is: '*O* is *n* meters long'. By analogy, we compare the picture with reality according to a rule. In this case, the rule determines the circumstances under which we call the picture correct or incorrect. I apply the rule both in judging whether the situation that a picture represents exists, that is, whether the picture is correct, and in constructing a picture that represents how things stand, that is, which correctly pictures what is the case. The result of applying the rule is that we affirm that a picture that represents a particular state of affairs shows how things stand or does not show how things stand, is correct or incorrect.

6. The rules of projection that make the comparison between a picture and reality possible do not require that the situation depicted in the picture exists; they require only that the elements of the picture are correlated with objects

whose combination may either be ‘of like sense’ or ‘of opposite sense’ with that depicted in the picture: ‘Only the end-points of the graduating lines *touch* the object that is measured’ (*TLP* 2.15121). It is only the elements of the picture that have objects correlated with them; the state of affairs that the picture represents may either exist or fail to exist. Wittgenstein goes on:

So a picture, conceived in this way, also includes the pictorial relationship, which makes it a picture.

The pictorial relationship consists of the correlation of the picture’s elements with things. (*TLP* 2.1513–2.1514)

Thus, the rules of projection, in virtue of which the picture has an internal relation to a possible state of affairs that it depicts, include the correlation of the elements of the picture with objects that are constituents of this state of affairs. The question now arises whether Wittgenstein holds that these correlations between the elements of a picture and objects that are constituents of the state of affairs it represents are made independently of, or prior to, the use of the elements in pictures that can be compared with reality for truth or falsity. One of the fundamental ideas of the anti-metaphysical reading of the *Tractatus* is that he does not, in this way, prioritize the relation of correlation between pictorial elements and objects, or use it to explain how a picture represents what it does. Rather, the correlation between pictorial elements and objects, which constitutes the pictorial relation, is to be understood as dependent upon the occurrence of the elements in pictures that can be compared with reality for truth or falsity. Thus, we do not have an idea of what constitutes a pictorial element or the object for which an element stands, and thus of the constituents of the state of affairs, independently of a recognition of something common between members of a class of pictures that can be compared with reality for truth or falsity. A pictorial element is essentially anything that a class of pictures can have in common; it is the equivalent of a non-logical constant; it is essentially a form and content.

Thus, the idea is that we should understand the correlation of pictorial elements with objects as consisting in the common contribution that the elements make to the members of a class of pictures, each of which can be compared with reality for truth or falsity. The correlation between the elements of a picture and the objects that are constituents of the represented state of affairs is shown in what is common between different combinations of the same pictorial elements in pictures that represent distinct states of affairs. The correlation of pictorial elements with objects consists in a common contribution

that pictorial elements make to what different pictures have in common with one another; a pictorial element is a common characteristic in a class of pictures, and the object it stands for is a common characteristic of the states of affairs that are pictured by the pictures in the class. Thus, what ties a picture to reality, for Wittgenstein, is not an immediate, extra-pictorial connection between pictorial elements and objects, but the rules of projection whereby each possible combination of a picture's elements determines the particular circumstances in which the picture is correct or incorrect. It is the possibility of comparing a picture with reality for correctness or incorrectness that constitutes a picture's connection with reality. It is, in other words, the sense of the picture that connects it with reality; the correlation of the picture's elements with objects is internal to a picture's expressing a sense insofar as a picture of a possible state of affairs is essentially articulate. To adapt a remark from 'Notes Dictated to Moore': the being true or false actually constitutes the relation of the picture to reality, which we mean by saying that it is a picture. Thus, '[w]hat is common to all representations is that they can be right or wrong, true or false' (NB, p.21).³

The articulation that is essential to picturing is manifest in the fact that a picture is essentially one possible combination of its elements in a system of possible combinations, each one of which represents a different possible occurrence of the common constituents in states of affairs. It is the projection of each of the pictures in the system onto reality that constitutes the relation of depicting; there is no correlation of elements with objects that are the constituents of the represented states of affairs that is independent of

³ cf. *Philosophical Remarks*, p.85: 'By application I understand what makes the combination of sounds or marks into a language at all. In the sense that it is the application which makes the rod with marks into a *measuring rod: putting language up against* reality.' On this interpretation, the 'method of projection' is to be thought of as rules that determine how a proposition is to be compared with reality for truth or falsity, i.e. it is at the level of whole propositions that language is projected onto the world. The meaning of the propositional constituents is fixed by means of the projection of the propositions in which they occur onto reality. This contrasts with interpretations which see the method of projection as a matter of directly correlating names with simple objects. Peter Hacker gives expression to the latter view as follows:

The function of objects, in the *Tractatus*, is to enable language to be unambiguously connected with the world. The method of projection uniquely correlates a name with [the] simple constituents of facts:

If the general description of the world is like a stencil, the names pin it to the world so that the world is wholly covered by it. (NB, p.53)

I want to argue that although there are remarks in the *Notebooks* that fit Hacker's interpretation, this strand is completely abandoned when Wittgenstein moves to the presentation of his ideas in the form of a treatise (the *Prototractatus*) in July 1915.

this projection. Insofar as the rules of projection that constitute the internal relation of depicting are equivalent to pictorial form, pictorial form essentially includes the correlation of pictorial elements with objects that are the constituents of the represented state of affairs. The existence of a rule that determines the circumstances in which a particular picture is correct or incorrect is essentially connected with the existence of a rule whereby the elements of the picture make a common contribution to determining the circumstances in which each picture in a whole class of pictures is correct or incorrect. In *TLP* 2.1515, Wittgenstein writes:

These correlations are, as it were, the feelers of the picture's elements, with which the picture touches reality.

It is in virtue of the correlations between elements and objects that are manifest in the common characteristics shared by a class of pictures that depict possible states of affairs that any individual picture represents a possible state of affairs. These correlations are equivalent to the graduation lines on a ruler: it is through our grasp of the contribution that the pictorial elements make to a picture that we grasp the rule for comparing the picture with reality. Thus, it is in virtue of the correlation of a picture's elements and objects that are the constituents of states of affairs that we depict states of affairs that either exist or do not exist. A picture is essentially articulate; it is essentially a determinate combination of elements that shows how the objects for which the elements stand must be combined if the picture is correct.

It is vital to Wittgenstein's conception of the internal relation of depicting that holds between a picture and a possible state of affairs that we recognize that the correlations between the elements of a picture and the objects for which they stand is not an empirical link, that is, a matter of a direct, external relation between two independent objects. The relation between an element of a picture and a constituent of the state of affairs it represents is one that is established by means of the rules of projection by which the pictures in which the element is a common constituent are projected onto reality. The correlation is internal to the system of representation that is constituted by these pictures in their projective relation to the world and is independent of whether any particular picture in the system is correct or incorrect. As we'll see in the next chapter, the idea that the correlation is independent of the correctness of any particular picture leads to the idea that genuine names must represent simple objects. Whatever is complex is conceived as consisting of objects in a certain combination. A complex, Wittgenstein holds, can be represented by

means of a symbol (a picture or a proposition) that combines elements that stand for these constituents (i.e. for the objects and the relation in which they stand to one another) in a determinate way; if the complex does not exist, then the picture or proposition that describes it is false, rather than nonsensical. If the correlation between a proposition and the state of affairs it represents is to be independent of the correctness (i.e. the truth) of any particular proposition, then, Wittgenstein will argue, the objects for which the elements stand cannot be complex; for otherwise, whether the proposition expresses a sense will depend upon whether another proposition is true. The object for which a propositional constituent stands must, therefore, be simple; it must be an object such that the sign that stands for it 'cannot be anatomized by means of definitions' (*TLP* 3.261).

7. The relation between a picture and the situation that it depicts is, then, an internal relation. The situation that a picture depicts is determined by a rule that projects the picture onto reality, that is, that determines the circumstances in which we call it true and, thereby, the circumstances in which we call it false. The rules of projection that make the comparison between a picture and reality possible already include the correlation of elements of the picture with objects that are the constituents of the state of affairs it represents. It is in virtue of the rules of projection, and the correlations between pictorial elements and objects that are implicit in them, that the picturing fact (the arrangement of pictorial elements) is correlated with a pictured fact or situation (the possible state of affairs that it depicts). Wittgenstein's logical investigation is directed towards the further clarification of the rules of projection whereby a picture represents a possible state of affairs and can be compared with reality for truth or falsity.

This understanding of the nature of Wittgenstein's enquiry provides the context for the interpretation of the following remarks:

If a fact is to be a picture, it must have something in common with what it depicts.

There must be something identical in a picture and what it depicts, to enable the one to be a picture of the other at all. (*TLP* 2.16—2.161)

The items that we're concerned with here are the picture qua determinate combination of pictorial elements and the state of affairs that it depicts. In terms of the analogy of *TLP* 4.014, we are concerned, for example, with the musical score and the musical sounds that it depicts. There must be something in common between the picturing fact (the musical score) and what it pictures (the musical sounds) in virtue of the fact that we are able to derive one

from the other. At *TLP* 4.014, Wittgenstein describes what the musical score and the musical notes have in common as follows: ‘They are . . . constructed according to the same logical pattern.’ Thus, what is common between the musical score and the music that it depicts resides in the fact that one is a projection of the other, for example, in the fact that we construct the music on the basis of the determinate combination of pictorial elements that constitutes the musical score. The structure of the elements in the score is preserved in the structure of the music that is projected from it. In the case of a picture, what is represented is a possible state of affairs. There must be something in common between the picture and the state of affairs it depicts; there must be something in common between the picturing fact (the picture) and the pictured fact (the represented state of affairs) in virtue of the fact that we derive one from, or construct one on the basis of, the other. There must, that is, be something in common between a picture and the reality it depicts insofar as one is projection of the other.

Wittgenstein goes on:

What a picture must have in common with reality in order to be able to depict it—correctly or incorrectly—in the way that it does, is pictorial form. (*TLP* 2.17)

A picture is articulate, that is, it is a combination of elements. A picture depicts a possible state of affairs insofar as it belongs to a system of pictures that stands in a projective relation to the world. Pictorial form is the possibility for combining pictorial elements in pictures that are projected onto reality. The rules that constitute pictorial form are rules that determine the circumstances under which each particular picture in a system of pictures is true or false. That is to say, they are the rules that determine the possible state of affairs that a particular picture represents. Thus, the possibilities for combining pictorial elements in pictures essentially mirrors the possibilities for combining the constituents for which they stand in states of affairs. This mirroring is not a one-to-one correspondence in possibilities for combining elements between systems that do not have any essential relation to one another. The mirroring is rather a reflection of the fact that the relation of picturing that holds between the picturing facts and the states of affairs they depict is an internal relation, that is, a relation that arises from the existence of a rule that projects the pictures onto reality. The pictures and the reality they depict are ‘constructed according to the same logical pattern’ in this sense: the method of projection preserves the logical structure that is internal to a system of pictures that is projected onto

reality in what is projected, namely the states of affairs that the pictures belonging to the system represent. To say that there is agreement in form between a picture and reality is, at bottom, to say no more than that there is a rule of projection whereby the picture, which is essentially structured, is projected onto reality, that is, whereby it represents a possible state of affairs whose internal structure is mirrored in the internal structure of the picture that represents it.⁴

A picture shares a form with the reality it depicts. Thus, '[a] picture can depict any reality whose form is has.' That is to say, '[a] spatial picture can depict anything spatial, a coloured one anything coloured, etc.' (*TLP* 2.171). There are, in other words, rules of projection whereby a spatial picture can be used to represent a spatial complex or state of affairs, a coloured picture a coloured complex or state of affairs, and so on. Wittgenstein goes on:

A picture cannot, however, depict its pictorial form: it displays it. (*TLP* 2.172)

The rules of projection which are manifest in one fact's coming to be used as a picture of another are not themselves something that can be pictured. Rules of projection are shown in the use of one fact to represent another and they cannot themselves be included in the picture; they are what project the representing fact onto the fact that is represented and they cannot themselves be projected (i.e. represented in a picture). What is represented in a picture depends upon the projection that we make of it; whatever is in the picture cannot be what makes the projection of it onto reality, but is what stands in need of projection; whatever we make part of a picture has still to be projected. Wittgenstein attempts to clarify this further in a series of remarks that explore the essential distinction between the rules of depiction and what is depicted.

At *TLP* 2.173, Wittgenstein writes:

A picture represents its subject from a position outside it. (Its standpoint is its representational form.) That is why a picture represents its subject correctly or incorrectly.

⁴ In *Philosophical Grammar*, Wittgenstein writes:

Like everything metaphysical the harmony between thought and reality is to be found in the grammar of language.

Here instead of harmony or agreement of thought and reality one might say: the pictorial character of thought. But is this pictorial character an agreement? In the *Tractatus* I had said something like: it is an agreement of form. But that is misleading. . . .

For what I said really boils down to this: that every projection must have something in common with what is projected no matter what is the method of projection. But that only means that I am here extending the concept of 'having in common' and making it equivalent to the general concept of projection. (*PG*, pp.162–3)

A picture does not require the existence of the state of affairs it represents; the state of affairs it represents may either exist or not exist. What makes this possible is precisely that the picture is a picture, that is, a determinate combination of elements. The elements of the picture are essentially the common characteristics of the members of a class of pictures that represent possible states of affairs. Thus, a picture depicts a possible state of affairs in virtue of its place in the system of representation to which it belongs, and independently of whether what it depicts exists or does not exist. What a picture represents can be correct or incorrect, true or false: ‘What a picture represents is independent of its truth or falsity’ (*TLP* 2.22). The possible state of affairs that a picture depicts is the sense of the picture: ‘What a picture represents is its sense’ (*TLP* 2.221). The rules of projection that are manifest in the possibilities for combining pictorial elements in structures that represent possible states of affairs are what make it possible to compare a particular picture with reality. What a picture represents it represents ‘by means of its pictorial form’ (*TLP* 2.22), that is, by means of the rules of projection that determine the circumstances in which a picture, in which these pictorial elements are combined in this way, is true or false. The rules of projection cannot themselves be represented in a picture that can be compared with reality, insofar as they are what make the comparison between the picture and reality possible: ‘A picture cannot . . . place itself outside its representational form’ (*TLP* 2.174). The rules that determine how a picture is to be compared with reality are shown in the application of the picture, that is, by the circumstances in which we call it correct or incorrect. What shows itself in the application of the picture, the picture cannot represent.

8. The essence of picturing lies in the existence of rules of projection whereby a picturing fact (i.e. a determinate combination of pictorial elements) can be compared with reality for truth or falsity. We saw just now that a picture can depict any reality whose form it has. The rules of projection for a spatial picture are rules that determine, for each possible combination of pictorial elements in a spatial picture, the spatial complex (i.e. the spatial state of affairs) that it represents. Wittgenstein now observes:

What any picture, of whatever form, must have in common with reality, in order to be able to depict it—correctly or incorrectly—in any way at all, is logical form, i.e. the form of reality. (*TLP* 2.18)

This remark expresses Wittgenstein’s commitment to the idea of an essence of representation, which I have taken to be one of a number of preconceptions

that form the framework of his enquiry. There is a common logical form shared by all systems of representation that are projected onto reality. Given the identification of the notion of form with the idea of rules of projection, we can understand the idea as follows. There is a something shared by all rules of projection in virtue of which facts, of whatever kind, come to represent possible states of affairs, that is, in virtue of which particular facts depict reality. Wittgenstein calls what is common to all rules of projection whereby one fact comes to represent another ‘logical form’. Logical form is the common logical pattern that is shared by all systems of representation in which we picture states of affairs; logical form constitutes the rules of projection that are essential to any system within which we construct pictures that are true or false. Thus, logical form is what is essential—i.e. common—to all rules of depiction that determine, for each particular picture in a system of representation, the circumstances in which we call the picture true or false. Logical form constitutes the rules of projection that are essential to all representation as such; it is what is common to all systems of representation within which we construct pictures that are true or false. Thus, ‘[e]very picture is *at the same time* a logical one’ (*TLP* 2.182).

9. The sense of a picture is determined by the rules of projection that make it possible to compare the picture with reality; the rules of projection restrict the result of the comparison to one of two alternatives: yes or no. The sense of a picture either agrees or disagrees with reality. Either the objects, which are represented by the elements of the picture, are combined in the way that the picture represents, or they are not. In grasping the sense of a picture, we grasp what it is for it to be true and, by the same stroke, what it is for it to be false, and that these possibilities represent opposing alternatives: if the picture is not true it is false, and vice versa. The sense of a picture is essentially linked with true–false poles:

What a picture represents is its sense.

The agreement or disagreement of its sense with reality constitutes its truth or falsity. (*TLP* 2.221–2.222)

It is also clear that the only way to tell whether a picture is true or false is to compare it with reality. It belongs to the essence of picturing that we cannot tell from the picture alone whether it is correct or incorrect: ‘There are no pictures that are true a priori’ (*TLP* 2.225).

It is now clear that bipolarity belongs to the essence of picturing in general. At *TLP* 2.201–2.203, Wittgenstein writes:

A picture depicts reality by representing a possibility of existence and non-existence of states of affairs.

A picture represents a possible situation in logical space.

A picture contains the possibility of the state of affairs it represents.

Beginning with the final remark, we can now understand it as an expression of Wittgenstein's central idea that a picturing fact is internally related to the fact it represents. The internal relation consists in the existence of rules of projection by which we can derive from the picturing fact a representation of a state of affairs that either exists or does not exist. The logical articulation that is essential to picturing means that these rules of projection already include the correlation of the pictorial elements with objects that are the constituents of the represented state of affairs. This articulation is manifest in what is common between members of a class of pictures, that is, between pictures that constitute different possible arrangements of the pictorial elements in ways that represent different possible combinations of the objects for which they stand in states of affairs. The rules by which the pictures in a system of representation are projected onto reality are what make it possible to compare any particular picture with reality. Reality determines the result of the comparison in the way that an object determines the result of measuring it; reality does not determine the possibility of the comparison, but its outcome. The possibility for the comparison depends only upon the existence of the rules of projection that lay down what counts as the picture's being true or false. The rules of projection include the correlation of the pictorial elements with objects that are the constituents of the states of affairs that are depicted, but they do not require that any particular possible state of affairs actually exists. Thus, the possibilities for the existence and non-existence of states of affairs is independent of what is the case.

The idea of logical space, which Wittgenstein introduces in the second remark above, is the space of possibilities for the existence and non-existence of states of affairs. Thus, logical space exists independently of what is the case. A picture's place in logical space is guaranteed by its place in a system of representation that exists in a projective relation to reality. Thus, the rules of projection that determine the circumstances in which a particular picture is true or false creates an internal relation between the picture and the entire logical space of possibilities for the existence and non-existence of states of affairs. The bipolarity, which, as Wittgenstein points out in the first remark, belongs to the essence of picturing, is thus seen to be essentially connected,

via the essential logical articulation of pictures, with the existence of a system of possible pictures within which each particular picture determines a place. Thus, the essence of picturing is seen to be essentially connected with the existence of a logical space of possibilities that is independent of what is the case, that is, independent of the truth or falsity of any particular picture. This is something that belongs to the logic of depiction. It does not go beyond what Wittgenstein believes is manifest in the way pictures function.

10. So far we have been looking at Wittgenstein's investigation of the logic of portrayal insofar as it is concerned with a completely general notion of pictures. At *TLP* 2.181, he introduces the idea of a special class of pictures, namely those 'whose pictorial form is logical form'. He calls these 'logical pictures'. As we saw just now, all pictures are logical pictures, but some pictures are also spatial pictures. A picture whose pictorial form is logical form is a logical picture in a more restricted sense of the term. What signifies in a logical picture of a state of affairs is purely what is common to all pictures that can represent that state of affairs; everything else is arbitrary to the picture's signifying what it does. Thus, there are rules of projection that enable us to derive, from a knowledge of how the elements are combined in a picture, a knowledge of the state of affairs that the picture represents, but this rule does not depend upon there being anything in common between the picture and the fact that it pictures over and above what is essential in order for one to be a picture of the other. That is to say, what signifies in a logical picture of a state of affairs is purely what the picture has in common with all pictures that can be used to picture that state of affairs. In the next chapter, I will look in more detail at Wittgenstein's investigation of logical pictures.

5

Propositions

1. Wittgenstein's investigation of propositions as logical pictures is undertaken within the context of his clarification of the essence of picturing in general. The aim of the investigation is to clarify the internal relation between a proposition and the situation it represents. Wittgenstein's fundamental insight is that a proposition represents a possible state of affairs insofar as it is a logical portrayal of it. The investigation of picturing in general shows that the internal relation between a picturing fact and the situation that it represents consists in rules of projection whereby we can derive from the picturing fact a representation of a state of affairs that either exists or does not exist. The articulation that is essential to picturing means that the rules of projection by which we derive the representation of a state of affairs include the correlation of elements of the picture with the constituents of the state of affairs it represents. This correlation exists insofar as the rules of projection are essentially rules by which we can determine, for each picture in a system of pictures, the circumstances under which we call it correct or incorrect. The constituents of states of affairs for which the pictorial elements stand are the common characteristics of classes of states of affairs that are represented by pictures that share pictorial elements.

Thus, the bipolarity that belongs to the essence of picturing is essentially connected, via the essential logical articulation of pictures, with the existence of a system of picturing within which the logical place—i.e. the truth-conditions—of each particular picture is determined. What we see as a result of Wittgenstein's investigation of picturing in general is that clarifying the internal relation between a proposition and the situation it represents means making perspicuous the way in which a proposition determines a place within a system of representation that exists in a projective relation to the world. The task of clarifying how a proposition expresses its sense has been resolved into the task of making clear the way in which a propositional sign determines a place in logical space.

2. Wittgenstein first introduces the idea of a logical picture in *TLP* 2.181:

A picture whose pictorial form is logical form is called a logical picture.

Logical form is the common logical pattern that is shared by all pictures that picture a particular possible state of affairs. I suggested earlier that we might think of logical form as everything that is essential to the projection of a picturing fact onto reality. All pictures of possible states of affairs are, therefore, logical pictures. What is distinctive about logical pictures, in the more restricted sense in which a proposition is a logical picture, is that what signifies in a logical picture are purely its logical properties, everything else is arbitrary. That is to say, what signifies in a logical picture of a state of affairs is purely what the picture has in common with all pictures that can be used to represent that state of affairs; that without which the sign could not be a picture of that state of affairs; that which is essential to any picture that can be used to represent that state of affairs:

The possibility of all imagery, of all our pictorial modes of expression, is contained in the logic of depiction. (*TLP* 4.015)

Thus, Wittgenstein is committed to the idea that all pictures that represent a particular state of affairs share a common essence, that is, a common logical form. Propositions—that is to say, logical pictures—picture a particular state of affairs in virtue of their logical form. Wittgenstein is also committed to the idea that there is something that all pictures that represent possible states of affairs share, that is, to the idea of the essence of representation as such. Thus, the logic of our language comprises what is essential to representation as such and what is essential to the representation of the particular states of affairs that are pictured by the elementary propositions of our language. Wittgenstein's central aim in the *Tractatus* is to make perspicuous the essence that is shared by all propositions, that is, everything that is essential to any proposition's expressing a sense. Insofar as all pictures are logical pictures, his aim is to make clear what is essentially shared by all representations of possible states of affairs. Thus:

To give the essence of a proposition means to give the essence of all description, and thus the essence of the world. (*TLP* 5.4711)

Wittgenstein's central investigation is directed, then, at everything that is essential to the method of projection whereby one fact becomes a picture of another. His aim is to make perspicuous everything that is essential to the rules of projection that make it possible to compare any picture, of whatever

form, with reality. In saying that logical form is the form of reality, or that the essence of the proposition is the essence of the world, Wittgenstein is not to be understood as claiming that two independent items share something—a form—which each has independently of the other. It is rather that in clarifying everything that is essential to the rules whereby a picturing fact can be compared with reality for truth or falsity, we are clarifying what is essential to the representation of reality as such. Wittgenstein is not attempting to deduce something about a reality that lies outside language, but is attempting to clarify the logical order that is essential to any system in which possible states of affairs are represented. We can think of this logical order as what language and reality essentially have in common insofar as the logical order of the method of projection is essentially preserved in what is projected. It is in this sense that the clarification of what all representations of reality essentially share is the clarification of what is essentially common to a representation and the reality it depicts. We are not being directed to an order that is there independently of language, but to the order that is essential to the depiction of states of affairs, to the depiction of reality as such.

At *TLP* 3.032, Wittgenstein writes:

It is impossible to represent in language anything that ‘contradicts logic’ as it is in geometry to represent by its co-ordinates a figure that contradicts the laws of space, or to give the co-ordinates of a point that does not exist.

Logic, the essence of representation as such, constitutes everything that is essential to the rules of projection whereby we determine the place of a proposition in logical space; it is what is common to any system of representation within which we express propositions that can be compared with reality for truth or falsity. Every proposition expressed in language belongs to a system of representation that stands in a projective relation to the world. There is no proposition that lies outside the logical space that is constituted by the rules of projection that determine the circumstances in which each proposition in a system of propositions is true or false. A sign that is not projected onto reality by rules of projection is not a sign of any language, and it does not express a sense. We cannot construct a proposition that ‘contradicts logic’ insofar as logic is everything that is essential to the rules of projection whereby a propositional sign becomes a logical picture of a state of affairs. Thus, logic is not something outside language that is authoritative for thought insofar as we think truly. Rather, logic is internal to representation and thought as such: ‘we could not *say* what an “illogical” world would look like’ (*TLP* 3.031).

3. The aim of Wittgenstein's logical investigation is to make perspicuous the essence of a proposition, that is, the essence of all representation of states of affairs. However, he first introduces the idea of logical pictures in relation to thoughts: 'A logical picture of facts is a thought' (*TLP* 3). The remarks on the relation between thoughts and propositions that occur between *TLP* 3 and 3.12 are problematic to the extent that they give expression to a conception of thinking which Wittgenstein quickly comes to recognize is mistaken. However, the mythological idea of thought that is expressed in these remarks emerges, in part at least, in an attempt to do justice to an insight about language that he never abandons, namely that it is only on an occasion of someone's using a sentence of ordinary language to say something—to express a thought—that the words he utters express a definite sense.

The myth that Wittgenstein later suggests he succumbs to in the *Tractatus* is that we can think of the use of language on particular occasions to express thoughts with a definite sense as a process of translation, in which we derive the propositional sign that expresses the thought from the thought itself. He does not, however, make the mistake of thinking of the thought as the meaning of the propositional sign that expresses it, or of thinking that thoughts symbolize in some special way. Rather, the thought itself is conceived as a logical picture of a state of affairs, which is complete before its expression, and which is then clothed in the propositional sign that expresses it.¹ Wittgenstein does not make any empirical claim concerning the constituents of thought or concerning the relation between thought and language. However, the idea of thoughts as logical pictures leads him to make claims about the essence that thoughts share with all other logical pictures that represent states of affairs. Thus, thoughts are logical pictures insofar as there are rules of projection by which the determinate combination between the elements of the thought determines the circumstances in which the thought is true or false. As Wittgenstein remarks in a letter to Russell, '[he doesn't] know *what* the constituents of a thought are but [he knows] *that* it must have such constituents which correspond to words of language' (*CL*, p.125). He knows this insofar as this is the essence of all logical pictures; it is what all logical pictures have in common: 'For a thought too is, of course, a logical picture of the proposition, and therefore it just is a kind of proposition' (*NB*, p.82).

¹ The idea that thoughts are logical pictures in just the same sense in which the propositional sign that expresses it is a logical picture—i.e. that thoughts do not symbolize in some special way and are certainly not to be thought of as what gives a propositional sign its meaning—is also defended by Winch. See P. Winch, 1987, p.15.

At *TLP* 3.001, Wittgenstein writes:

‘A state of affairs is thinkable’: what this means is that we can picture it to ourselves.

What is thinkable is what we can represent in a logical picture. A logical picture represents a possible state of affairs insofar as there are rules of projection which determine the place of the picture in logical space, and which make it possible to compare the picture with reality for truth or falsity. A thought’s place in logical space is equivalent to its place in a system of representation that exists in a projective relation to the world. Thinking is a way of operating with signs, but the signs are not the expressions of ordinary language. The signs are, rather, some sort of psychological equivalent to the expressions of ordinary language, and they get their meaning in the same way as the expressions of ordinary language do: by their place in a system of representation that exists in a projective relation to the world.

A thought determines a place in logical space and the existence of the place guarantees that what the thought represents is possible, that is, can be compared with reality for truth or falsity: ‘What is thinkable is possible’ (*TLP* 3.02). By the same stroke, there is no thought outside the logical space that is constituted by the rules of projection that determine the circumstances in which a particular thought is true or false. Thus, there is no thought outside the logical order that is essential to any system of representation as it stands in a projective relation to the world: ‘Thought can never be of anything illogical, since if it were we should have to think illogically’ (*TLP* 3.03). Furthermore, there are no thoughts that are true a priori. A thought exists insofar as there are rules of projection that determine its place in logical space. This place exists independently of what is the case, that is, independently of the truth or falsity of any particular thought. Thus, we cannot tell from the possibility of a thought whether the state of affairs that it represents exists or does not exist. It is only by comparing the thought with reality that the existence or non-existence of the state of affairs that it represents—that is, the truth or falsity of the thought—can be determined. Finally, a thought represents a state of affairs insofar as there is a rule that determines the circumstances under which the thought is true and the circumstances under which it is false. Thus, if a thought is true, then the state of affairs that it represents exists: ‘the totality of true thoughts is a picture of the world’ (*TLP* 3.01).

A thought is a logical picture of a possible state of affairs. The elements of the thought are correlated with objects and the way in which the elements are combined in the thought represents a possible arrangement of the objects in

a state of affairs. There is a rule of projection that determines, on the basis of these elements combined in this way, the circumstances in which the thought is true and the circumstances in which it is false. A thought has a definite sense. At *TLP* 3.1–3.11, Wittgenstein writes:

In a proposition a thought finds an expression that can be perceived by the senses.

We use the perceptible sign of a proposition (spoken or written, etc.) as a projection of a possible situation.

The method of projection is to think of the sense of the proposition.

Once we have framed a definite thought, we use a propositional sign to give expression to it. We derive from the thought a perceptible propositional sign that we use to represent a state of affairs as we imagine it. We use the propositional sign as the projection of this possible situation. The propositional sign did not exist in an internal relation to the situation I use it to represent prior to my using it to represent it. I use the expressions of ordinary language and the rules for projecting them onto reality as a representation of the quite specific state of affairs that I already represent to myself in thought. For example, I use the ordinary language sentence ‘My watch is on the table’ as a representation of a specific state of affairs as I imagine it. I do this by ‘think[ing] of the sense of the proposition’. That is to say, I do it by using a propositional sign of ordinary language as a projection of the particular state of affairs that I represent to myself in thought. I apply the rule for projecting this propositional sign onto reality to the very situation I represent to myself in thought. In use the propositional sign stands in a projective relation to the world insofar as it is used to represent a particular state of affairs as I imagine it.

A proposition is a propositional sign in its projective relation to the world. It is a sentence of a language as it is used on particular occasions to say how things are. It is only when the sentence is used on a particular occasion to express a definite thought that a particular state of affairs exists that it expresses a proposition with a definite sense that can be measured against reality for truth or falsity: ‘[a] propositional sign, applied and thought out, is a thought’ (*TLP* 3.5); ‘[a] thought is a proposition with sense’ (*TLP* 4). Given this understanding of the relation between a thought and the propositional sign that expresses it, we can interpret the series of remarks that make up *TLP* 3.13 as follows. The series begins:

A proposition includes all that the projection includes, but not what is projected.

A proposition can be used on a particular occasion to represent a state of affairs as I imagine it. What is projected is the particular state of affairs that

is represented by the thought that I use the propositional sign to express. I make the projection by using the propositional sign as a representation of this particular state of affairs. A proposition with sense is a propositional sign in its projective relation to the world insofar as it is a sign that is applied on a particular occasion to represent how things are.

Wittgenstein goes on:

Therefore, though what is projected is not itself included, its possibility is.

A proposition does not by itself signify a particular state of affairs, but it has the possibility of signifying it. A sentence of ordinary language is not yet an expression with sense, but it specifies the form of a proposition that the propositional sign can be used, on a particular occasion, to express. A proposition 'does not', therefore, 'actually contain its sense, but it does contain the possibility of expressing it'. A proposition has content, that is, a definite sense, insofar as it is used on particular occasions to say how things are: '(The content of a proposition means the content of a proposition which has sense.)'. Thus, '[a] proposition contains the form, but not the content of its sense.' On a particular occasion on which a speaker uses a propositional sign to express a thought, the sign is given a determinate content that represents a particular state of affairs: 'A propositional sign, applied and thought out, is a thought' (*TLP* 3.5).

4. So far, the mythology of the pre-existing thought, misleading as it is, appears relatively innocuous. However, as we shall see, the idea of thoughts as logical pictures with a definite sense is also used by Wittgenstein to underpin the problematic conception of analysis that the idealized conception of a proposition commits him to. The fundamental idea of propositions as logical pictures is that 'only facts can express a sense, a set of names cannot' (*TLP* 3.142). A proposition is a logical picture insofar as it places elements that are representatives of objects in a combination that portrays how those objects are combined if the proposition is true:

Instead of 'The complex sign " aRb " says that a stands to b in the relation R ', we ought to put, 'That " a " stands to " b " in a certain relation says that aRb '. (*TLP* 3.1432)

I shall take it that ' a ', ' b ' and ' xRy ' are names that stand for objects, that is, expressions that stand for the constituents of the state of affairs that is described by the proposition ' aRb '; each of these expressions constitutes a

common element in a class of propositions.² The way that these names are combined in the proposition, ‘ aRb ’, shows how the objects for which they stand are combined if ‘ aRb ’ is true. Thus, by putting the names ‘ a ’ and ‘ b ’ in a certain relation—namely, in the first and second argument place of ‘ xRy ’, respectively—the proposition combines these propositional elements (‘ a ’, ‘ b ’, and ‘ xRy ’) in a way that represents that the objects for which ‘ a ’, ‘ b ’, and ‘ xRy ’ stand are combined in a certain way, namely the way that is represented by the proposition ‘ aRb ’.³ Thus, that ‘ a ’ stands to ‘ b ’ in a certain relation—in the first and second argument place of ‘ xRy ’, respectively—determines the rule by which ‘ aRb ’ is compared with reality. A different determinate combination of these three constituents—in which ‘ b ’ and ‘ a ’ are put in a certain relation—represents a different determinate combination of the objects for which they stand, namely the way that is represented by the proposition ‘ bRa ’.

The relational expression, ‘ xRy ’ is, on this view, a name of an object insofar as it is a propositional element that stands for a constituent of the state of affairs that is described by ‘ aRb ’, a constituent which also occurs in ‘ bRa ’, ‘ cRd ’, and so on. The object for which ‘ xRy ’ stands consists in the common contribution that ‘ xRy ’ makes to the sense of each member of this class of

² This view is taken by McGuinness: ‘(. . . I take it that the names and the objects, by the time of the *Tractatus* at any rate, were alike simple in the sense of containing no parts that were names or objects. In this sense something like “. . . is human” might be a name, and stand for an object’) (McGuinness, 1974/2002, p.111). Ishiguro holds, by contrast, that “ $g(a, b)$ ” will express a state of affairs involving two objects not three’ (Ishiguro, 1969, p.28). Ishiguro, following Anscombe, argues that the function, $\Phi(x.y)$ is not a constituent of the proposition, but a way of combining the names ‘ a ’ and ‘ b ’. Thus: ‘. . . it is essential to have constituents which stand for the [objects that the proposition is about] but it is not necessary to have a function sign. What particular function of the names it is can be indicated by a specific concatenation of the names of the objects, which is not to be treated as a list of names’ (Ishiguro, 1969, p.41). These two views represent opposing traditions in the interpretation of Wittgenstein’s conception of names and elementary propositions. The first view is associated with Ramsey (see Ramsey, 1923/1931, p.275) and Stenius (see Stenius, 1960, chapter v) and is currently defended by P.Sullivan (see Sullivan, 1990); the second is associated with Anscombe (see Anscombe, 1971, pp.36–40) and is currently defended by T.Ricketts (see Ricketts, 1996, section III; 2002, pp.235–7). I am grateful to Peter Sullivan for persuading me that the Ramsey view is the correct one.

³ Peter Sullivan (Sullivan, unpublished) points out the importance of the terminological distinction between names being *combined* in a proposition (‘ a ’, ‘ b ’, and ‘ xRy ’ are *combined* in ‘ aRb ’) and the names ‘ a ’ and ‘ b ’ *standing in a certain relation* in ‘ aRb ’. Thus, Wittgenstein speaks exclusively of a proposition’s consisting of names ‘in combination with one another’; he speaks only of Fregean names ‘standing in a certain relation’ to one another in the proposition ‘ aRb ’. That is to say, he does *not* speak of a proposition’s consisting of names ‘in a certain relation’ to one another. As Sullivan puts it ‘Two Fregean names’ being related to one another is . . . just one illustration of how three Wittgensteinian names might be combined’ (Sullivan, unpublished).

propositions, that is, to the rule by which each of these propositions is compared with reality. As we saw in the previous chapter, the rule of projection that determines the circumstances in which a picture is correct or incorrect already includes the correlation of the elements of the picture with objects that are constituents of the state of affairs it represents. However, we have no grip on the objects for which the elements stand that is independent of our grasp of the common contribution that the elements make to a class of pictures. Thus, the distinction between a picture and the pictorial elements that are its constituents is fundamental to the concept of picturing in general: a picture is essentially a combination of elements. The distinction between a proposition and a name (or word) is, therefore, already included in the idea of propositions as logical pictures.⁴

5. At *TLP* 3.144, Wittgenstein turns to the further investigation of the logical distinction between names (words) and propositions that is implicit in the understanding of how a proposition expresses its sense. He writes:

Situations can be described but not *given names*.

(Names are like points; propositions like arrows—they have a sense.)

At this point it begins to become clear that Wittgenstein treats the concept of a fact and the concept of a complex as equivalent, that is to say, he thinks of both concepts as expressing a unified notion of something whose existence depends upon constituents being combined in a determinate way. Thus, he thinks of a complex as a determinate combination of its constituents: objects (corresponding to ‘*a*’ and ‘*b*’) and the relation in which they stand. A complex can only be represented, therefore, by means of elements that stand for these constituents (the objects and the relation in which they stand) combined in a symbol (a proposition or a picture) that shows how the constituents are combined if it is correct. Whatever is complex, Wittgenstein believes, is a fact and it can only be described by means of a fact, that is, by means of an expression in which names of the constituents of the complex (the objects and the relation in which they stand) are combined in a structure that depicts a possible combination of these constituents in a state of affairs.⁵ Writing in June 1931,

⁴ There is, of course, no suggestion, on this account, that the expressions ‘*a*’ and ‘*b*’, on the one hand, and ‘*xRy*’, on the other, all symbolize in the same way. The claim is only that ‘*a*’, ‘*b*’, and ‘*xRy*’ are all simple, indefinable constituents of ‘*aRb*’. How each of these constituents symbolizes is shown by its use in propositions with sense. Clearly, the contribution made by ‘*xRy*’ is different from that made by ‘*a*’ and ‘*b*’.

⁵ In an entry in the *Notebooks* for 15.5.15, Wittgenstein writes: “The theory of the complex is expressed in such propositions as “If a proposition is true then Something exists”; there seems to be

he recognizes that both this conception of a complex and the assimilation of facts to complexes are mistaken, and he acknowledges that ‘Frege was aware of this and told me’ (*PR*, p.302).⁶

Wittgenstein’s later criticism of his early view confirms the idea that we should understand the implicit claim in *TLP* 3.144 as the claim, not merely that facts cannot be given names—i.e. that only a proposition can represent a fact—but that nothing that is complex can be given a name. Indicating a complex is essentially equivalent to describing the fact that its constituents (objects *and* the relation in which they stand) are combined in a state of affairs, something which can only be expressed by means of a proposition. Wittgenstein makes this point explicitly at *TLP* 3.24.

A complex can be given only by its description, which will be right or wrong. Thus, what can be named *cannot* be complex, that is, it cannot be described by means of a proposition: ‘a name cannot be dissected any further by means of a definition: it is a primitive sign’ (*TLP* 3.26); ‘[n]ames cannot be anatomized by means of a definition’ (*TLP* 3.261). Names correspond to objects that are essentially the constituents of complexes, that is, of states of affairs that are described by means of a proposition. Thus, what is named cannot be described by means of a proposition.

Wittgenstein first expresses his conviction that there must be primitive, indefinable symbols in ‘Notes on Logic’. He holds that indefinables are of two sorts: names and forms. His reason for holding this is the idea that underlies the conception of propositions as logical pictures: a set of names cannot express a sense. In a proposition names are combined with one another in a determinate way; the determinate way in which the names are combined represents how the objects for which the names stand are combined if the proposition is true. He explains why there must be indefinables as follows:

We must be able to understand propositions we have never heard before. But every proposition is a new symbol. Hence we must have *general* indefinable symbols; these are unavoidable if propositions are not all indefinable (*NL*, p.98)

a difference between the fact expressed by the proposition: *a* stands in the relation *R* to *b*, and the complex: *a in the relation R to b*, which is just that which “exists” if the proposition is true. It seems as if we could *designate* this Something, and what’s more with a real “complex sign” (*NB*, p.48). However, on an entry for 28.5.15, he writes: “‘Complex sign’ and ‘proposition’ are *equivalent*” (*NB*, p.52).

⁶ Wittgenstein does not only observe that there is a distinction between a fact and a complex (*PR*, p.301), but suggests that his conception of *both* a fact *and* a complex was mistaken. Thus: ‘To say that a red circle is *composed* of redness and circularity, or is a complex with these component parts, is a misuse of these word and is misleading’; ‘Neither is a house a complex of bricks and their spatial relations, i.e. that too goes against the correct use of the word’ (*PR*, p.302).

The ‘general indefinables’ are the forms, that is, what is expressed by ‘ xRy ’. Wittgenstein goes on:

A proposition must be understood when *all* its indefinables are understood. The indefinables in “ aRb ” are introduced as follows:

“ a ” is indefinable;

“ b ” is indefinable;

Whatever “ x ” and “ y ” may mean, “ xRy ” says something indefinable about their meaning. (NL, p.99)

Thus, as we just saw, ‘ a ’, ‘ b ’, and ‘ xRy ’ are all indefinable symbols that are combined in the proposition, ‘ aRb ’. Although Wittgenstein here distinguishes between names and forms, each of these indefinables represents a constituent of the state of affairs that is represented by ‘ aRb ’. Wittgenstein describes the contribution that ‘ xRy ’ makes to a proposition as follows:

I now determine the sense of “ xRy ” by laying down: when the facts behave in regard to “ xRy ” so that the meaning of “ x ” stands in relation R to the meaning of “ y ”, then I say the [the facts] are of “like sense” [“*gleichsinnig*”] with the proposition “ xRy ”; otherwise, “of opposite sense” [“*entgegengesetzt*”]; I correlate the facts to the symbol “ xRy ” by thus dividing them into those of like sense and those of opposite sense. To this correlation corresponds the correlation of name and meaning. (NL, p.104)

The same conception of the distinction in the contribution that is made by ‘ a ’ and ‘ b ’, on the one hand, and ‘ xRy ’, on the other, in the proposition ‘ aRb ’ is clearly preserved in *TLP* 3.1432. However, in the *Tractatus*, Wittgenstein uses the concept of a name, and the concept of an object that is its meaning, to cover indefinable expressions quite generally.⁷ This does not reduce a proposition to a set of names insofar as the indefinable expressions are identified as the common characteristics of propositions (representing facts in which names are combined with one another) that represent states of affairs; they are essentially the constituents of a proposition, that is, of a fact. Thus, the discussion of names that begins at *TLP* 3.2 is to be understood to concern the question

⁷ McGuinness describes the change between ‘Notes on Logic’ and the *Tractatus* as follows: ‘I will mention briefly the change which took place between *Notes on Logic* and the *Tractatus*: namely the abandonment of the notion that the components of propositions could be divided into constituents (names of individuals, apparently) and forms. Wittgenstein, anticipating much of his later philosophy, came to see—or to think—that naming also was not such a self-explanatory process as he had originally supposed. A name in his former sense also carried with it a conception of the form of proposition into which it would fit. Thus these names did not differ in principle from any other components of the proposition, all of which carry with them some principle for the discrimination of facts. All therefore could be called names’ (McGuinness, 1974/2002, p.114).

of the meaning of the simple, indefinable signs, that is, of the signs that are unanalysable constituents of a proposition with sense.

Wittgenstein's commitment to the possibility of simple names in the *Tractatus* remains grounded in the intuition that we've just seen him express in 'Notes on Logic'. The possibility of understanding propositions without having their sense explained to us is held to require the existence of 'simple signs' whose meanings 'must be explained to us if we are to understand them' (*TLP* 4.026). However, it might seem that this intuition is not enough on its own to take us all the way to the idea that simple signs cannot stand for complexes. Couldn't we, for example, accept ordinary names, predicates, and relational expressions as the primitive signs on which our understanding of propositions is based? How does Wittgenstein get from the idea of the logically simple constituents of propositions to the idea that these logically simple expressions cannot stand for anything complex? Why does he hold that a complex cannot be named, but 'can be given only by its description, which will be right or wrong'?

6. At *TLP* 3.23, Wittgenstein connects the demand for simple signs with the requirement that sense be determinate:

The requirement that simple signs be possible is the requirement that sense be determinate.

I suggested earlier that we should see Wittgenstein's commitment to the determinacy of sense as part of the overall framework within which the task of clarification undertaken in the *Tractatus* is carried out: 'When we say, and *mean*, that such-and-such is the case, we—and our meaning—do not stop anywhere short of the fact; but we mean: *this-is-so*' (*PI* 95). The idea that where there is sense there is logic, and where there is logic there must be perfect logical order, gives rise to the requirement that sense must be determinate. That is to say, there must be no question whether a proposition expresses a sense or of what the sense that it expresses is: a proposition must be essentially connected with the unique situation that it represents. However, as Wittgenstein sees it, the requirement that a proposition is essentially connected with the unique situation that is its sense just is the requirement that the logically simple names that occur in a proposition cannot stand for something that is logically complex: if sense is to be determinate, then the logically simple signs must be signs that '*cannot* be anatomized by means of definitions' (*TLP* 3.261). The logically simple constituents of propositions must be indefinable signs that cannot be further analysed, if there is to be such

a thing as determinate sense. Thus, Wittgenstein holds, as we've seen, that any sign that stands for a complex is a sign, not only that *can*, but *must* be anatomized by means of a definition.

It follows from all this that the demand for simple indefinable signs *is* the demand for names that stand for logically simple objects, that is, objects that cannot be described by means of a proposition. Thus, for Wittgenstein, the demand that the primitive names stand for logical simples is not an additional constraint that he imposes on primitive signs: given that the sense of a proposition is determinate—i.e. that the sense of a proposition is internal to the proposition and independent of any proposition's being true or false—the primitive signs that are its constituents, and on the basis of which we understand it, must be signs for logical simples. Wittgenstein makes the same point at *TLP* 2.0211–2.0212 as follows:

If the world had no substance, then whether a proposition had sense would depend on whether another proposition was true.

In that case we could not sketch any picture of the world (true or false).

The substance of the world is constituted by the logically simple objects for which primitive names stand. Thus, we could rewrite *TLP* 2.0211 as follows: if there were not primitive expressions that stand for logically simple objects, then whether a proposition had sense would depend on whether another proposition was true. The force of the above remarks, therefore, is that the existence of primitive expressions, which stand for logically simple objects that are the simple constituents of states of affairs, is a condition of our sketching any picture of the world, true or false. How are we to understand this claim?

Suppose that a propositional sign, $F(A)$, contains a simple sign, ' A ', that stands for a complex. Given that what the sign ' A ' stands for is complex, it can be described in a proposition, aRb , that is either true or false. If we hold that ' A ' is, nevertheless, a logically simple constituent of $F(A)$, then whether $F(A)$ has a sense, that is, a truth-condition, will depend on whether the proposition, aRb , is true. But in that case $F(A)$ is not a logical picture of a state of affairs, for we cannot know, on the basis of knowledge of how its constituent expressions are combined in the propositional sign, what state of affairs is represented by $F(A)$, for we do not know whether $F(A)$ represents a possible state of affairs (i.e. has a sense) at all. Wittgenstein's fundamental idea is that a picture stands in an internal relation to the fact that it represents. The internal relation consists in rules of projection whereby we can derive from a picturing fact a representation of a state of affairs that either exists or does not

exist. It is essential to the internal relation that holds between a picturing fact and the fact that it pictures that everything essential to the picture's representing what it does is determined by the system of representation to which the picture belongs, and does not depend upon anything's being the case.

Our ability to use a propositional sign to communicate a particular possible state of affairs depends, therefore, upon the existence of primitive signs whose meanings are not in question. In a remark from the *Prototractatus* that does not survive into the *Tractatus*, Wittgenstein writes:

The analysis of signs must come to an end at some point, because if signs are to express anything at all, meaning must belong to them in a way that is once and for all complete. (*PT* 3.20102)

The idea is that the meaning of a primitive sign belongs to it 'in a way that is once and for all complete', or 'ready-made', insofar as it is determined by the sign's place in a system of representation and does not depend upon the existence of any state of affairs, that is, on anything hypothetical. That is to say, determinacy of sense requires the existence of primitive signs that stand in an internal relation to the constituents of states of affairs; the correlation between the sign the constituent of states of affairs must be guaranteed by the existence of the sign within a system of representation that stands in a projective relation to the world. It must be the case that 'if everything behaves as if a sign had meaning, then it does have meaning' (*TLP* 3.328).⁸ A sign's behaving as if it had meaning—i.e. its being used in propositions with sense—is what constitutes its having a meaning; there is no more to the meaning of a primitive sign than its being used in propositions that are true or false. It is, therefore, impossible that the constituents of states of affairs for which names stand should be describable by means of propositions that are true or false; whatever is describable by

⁸ Tom Ricketts also makes this connection between the requirement that 'the representational character of thought and language' cannot be intelligibly questioned and the demand for simple signs for which Frege's context principle holds: 'It is enough if the proposition taken as a whole has a sense; it is this that confers on its parts also their content.' Thus, he sees Wittgenstein's demand for simple signs that lie at the end of a process of analysis as his way of securing 'Frege's underlying view of judgement that thought and language are presuppositionless: a proposition's having sense (its representing reality, its being true or false) does not depend on the truth of some other proposition' (Ricketts, 1985, p.9). I want to argue that this demand is met only if the meaning of a simple sign is entirely determined by its place in a system of representation that stands in a projective relation to the world, i.e. only if there is no idea of connecting a name with an object that is conceived as existing independently of language. The only alternative is to suppose that Wittgenstein offers a *reductio* argument to show that the world's consisting of simple objects is a necessary condition for our propositions' making sense, i.e. to embrace some version of the metaphysical interpretation. However, this hardly seems a way of making our language 'presuppositionless'.

means of a proposition can either exist or fail to exist. We use signs that stand for objects that are constituents of states of affairs in propositions that describe those states of affairs, and in this sense we can be said to speak about them. But these objects can only be named; they cannot be characterized in propositions. The simple signs that are the primitive constituents of propositions—the basic indefinables—constitute the elements of representation; the meaning of these signs is fixed and thus we can use them to construct propositions that communicate a new sense. As we've seen, Wittgenstein calls the constituents of states of affairs that correspond to simple names 'objects'. Thus:

Objects can only be *named*. Signs are their representatives. I can only speak *about* them: I cannot *put them into words*. Propositions can only say *how* things are, not *what* they are. (*TLP* 3.221)

Wittgenstein approaches the question of the need for the existence of primitive, undefinable names in another way at *TLP* 3.261. Once again, suppose that a propositional sign, $F(A)$, contains a simple sign, ' A ', that stands for a complex. Suppose that the complex that ' A ' stands for is described by the proposition, aRb . Given this description of the complex, we could introduce another sign, ' B ', which is the contraction of the symbol that describes the complex into a simple sign: $B = (\text{def})aRb$. The proposition expressed by a propositional sign of the form $F(B)$ is analysable as follows: $F(a) \& F(b) \& aRb$. However, we now have two signs, ' A ' and ' B ', that both stand for the same complex, but one of them, ' A ', is allegedly primitive and the other, ' B ', is defined. Wittgenstein clearly thinks that this is completely unacceptable: 'Two signs cannot signify in the same manner if one is primitive and the other is defined by means of primitive signs' (*TLP* 3.261). Signs that signify in the same manner must be the same symbol. We must, therefore, assume that the original sign, ' A ', also signifies via the signs that could be used to define it. Thus, '[e]very sign that has a definition signifies via the signs that serve to define it; and the definitions point the way' (*TLP* 3.261).

It follows from this that if a propositional sign contains a sign, ' A ', that stands for a complex, then the meaning of ' A ' is given by means of a definition: $A = (\text{def})aRb$. The sense of a proposition expressed by the propositional sign in which ' A ' occurs is perspicuously expressed by a propositional sign in which the sign ' A ' has disappeared and is replaced by a proposition, aRb , that describes that complex completely. Thus, the logical form of the proposition expressed by the propositional sign $F(A)$ is perspicuously represented as a complex proposition that has aRb as one of its conjuncts. The truth of

aRb is, in that case, not a condition of $F(A)$'s possessing a sense, but of the truth of the proposition expressed by the propositional sign $F(A)$. If aRb is false, then the proposition expressed by $F(A)$ is false, and not senseless. Once again, it follows from all this that a genuinely primitive sign is one that 'cannot be dissected any further by means of a definition' (*TLP* 3.26). Thus, '[n]ames cannot be anatomized by means of a definition' (*TLP* 3.261). Wittgenstein goes on: '(Nor can any sign that has a meaning independently and on its own)'. It is clear that we should understand this to mean any sign whose meaning does not depend on the meaning of its parts, that is, it includes all the basic indefinables that are the simple constituents of a proposition.

7. Wittgenstein does not, of course, give any examples of simple names. His logical investigation is concerned only with simple names as a logical necessity that arises out of the requirement that sense be determinate. This permits him to evade the question of how the demand for simple, undefinable names is realized in the propositions that we express by means of the propositional signs of ordinary language. However, it seems clear that, given the nature of the demand, the objects for which the primitive names stand cannot be anything like the bodies that are represented by our ordinary names. Objects are the meanings of the undefinable constituents of a proposition and, as we've just observed, the correlation between a name and an object must be completely independent of the existence or non-existence of particular states of affairs. Wittgenstein makes this point clearly in a later reflection on his own early work:

What I once called 'objects', simples, were simply what I could refer to without running the risk of their possible non-existence; i.e. that for which there is neither existence nor non-existence, and that means: what we can speak about *no matter what may be the case*.

What if someone said to me 'I expect three knocks on the door' and I replied 'How do you know *three knocks* exist?' — Wouldn't that be just like the question 'How do you know six feet exists?' after someone has said 'I believe A is 6 feet high?' (*PR*, p.72)

The existence of the objects that are the meanings of the primitive names that occur in fully analysed propositions must be guaranteed by the existence of these names within a system of representation that exists in a projective relation to the world, that is, within which we construct propositions that can be compared with reality for truth or falsity. There must not be more to the question of the existence of such objects than the existence of a name that is used as a common constituent in propositions with sense, that is, in propositions that can be compared with reality for truth or falsity: 'if everything

behaves as if a sign had meaning, then it does have meaning.’ By the same stroke, there is no more to knowing, or grasping, the object that is the meaning of a name other than knowing, or grasping, how to use the name that stands for it in propositions that represent possible states of affairs.

On this interpretation, Wittgenstein’s conception of a simple name does not express a version of realism, in which names are held to ‘forge a direct link’ between language and the world. The object for which a name stands is not something that exists over and against language, in an independent or transcendent realm, but is what we grasp when we grasp the meaning of the name, that is, when we grasp the contribution that the name makes to determining the sense of a class of propositions.⁹ Thus, at the level of simple names, we cannot understand two names without thereby knowing whether they have the same or a different meaning:

Can we understand two names without knowing whether they signify the same thing?—Can we understand a proposition in which two names occur without knowing whether their meaning is the same or different?

Suppose I know the meaning of an English word and of a German word that means the same: then it is impossible for me to be unaware that they do mean the same; I must be capable of translating each into the other. (*TLP* 4.243)

It’s now clear why Wittgenstein believes that the same holds for simple signs: to grasp the *Bedeutung* of a simple sign is equivalent to grasping the meaning of the sign (i.e. the contribution it makes to propositions with a sense), and to grasp the *Bedeutungen* of two simple signs is necessarily to grasp whether they have the same or different meaning. As I suggested in Chapter 1, I think that we should see Wittgenstein’s talk of objects here as the expression of the temptation to think of the meaning of a word as something that is distinct from its use, that is, to think of the meaning as

⁹ cf. Winch: ‘Proposition 3.203, “A name means an object. The object is its meaning”, . . . does not state that a certain relation holds between two terms. The only “relation” that could be in question here is an *internal* relation and, as such, it cannot be stated in a proposition, but will be exhibited in the propositions which describe states of affairs involving such terms’ (p.8); ‘A name has meaning if it behaves in language just as though it had one; in fact its having the meaning it does just consists in its “significant use”’ (Winch, 1987, p.9). Both Peter Hacker (Hacker 1999/2001) and Cora Diamond (Diamond 2005) object to Winch’s view on the ground that it entails that all names that share a logico-syntactic form are the same symbol, and that the only difference in meaning is difference in form. However, the objection takes no account of the fact that the meaning of a name consists in its contribution to the sense (i.e. truth-conditions) of the propositions in which it occurs and that propositions that share a logical form will be true or false in different circumstances. Only names that are substitutable everywhere *salva veritate* are the same symbol. It is the being true or false that constitutes the relation of propositions to reality and confers content on propositional constituents.

something that is correlated with the word, as something that we have before our minds when we hear the word and understand it. As he puts it in the *Investigations*, he is using ‘the word “meaning” . . . illicitly . . . to signify the thing that “corresponds” to the word’. He suggests that this ‘is to confound the meaning of a name with the *bearer* of the name’ (PI 40), a distinction which he had not clearly grasped in the *Tractatus*. The bearer of a name corresponds to the name, but it is not the meaning of the name; the meaning of a name, Wittgenstein will argue, does not ‘correspond’ to it, but is ‘its use in the language’ (PI 43). In the *Tractatus*, it is a strange, ‘illicit’ conflation of the concept of the meaning of a name and the concept of the bearer of a name that underlies the conception of the meaning of simple names as objects for which they stand. As McGuinness points out: ‘It is inconceivable that anything which can function as a name at all should lack a bearer, just because its bearer is given with its semantic role’ (McGuinness, 1981/2002, p.89).

It is clear that, on the above interpretation of Wittgenstein’s conception of the meaning of a name, the objects for which simple names stand are not, as McGuinness observes, ‘concrete objects which may sensibly be said to exist or not’ (McGuinness, 1981/2002, p.93). Everything that can exist or fail to exist is a complex (or fact), that is, something describable by means of a proposition in which names are combined, but which cannot be named. The familiar empirical objects for which our ordinary names appear to stand are not, on this view, logically objects or things at all. The expressions that appear to stand for empirical objects will be replaced on analysis by propositions that describe states of affairs that have logically simple constituents that correspond to the primitive signs of the system of representation. At the end of analysis we will have reached propositions that are configurations of simple signs whose meaning is guaranteed by the fact that the sign is a symbol that makes a common contribution to the sense of a class of propositions, that is, to a class of propositions that are determinately either true or false.

The most plausible candidates for the kind of representational elements that Wittgenstein had in mind as the simple constituents of fully analysed propositions are names of spatial or material points, colours, temporal points, and so on, and expressions that are functions of these.¹⁰ To understand a sign

¹⁰ It seems possible that Wittgenstein conceived the fully analysed propositions of the *Tractatus* to be descriptions of immediate experience expressed in a ‘phenomenological language’. It may be that he was thinking of the propositions of ordinary language as ‘hypotheses’ that receive their connection with reality via their relation to the fully analysed propositions that constitute their empirical content on some particular occasion of use. The fact that Wittgenstein does not make any

that stands for any one of these elements is necessarily to grasp the whole system of representation within which it has its place. On a particular occasion on which a proposition in which the name of a simple occurs—say ‘Red at such-and-such a place at such-and-such a time’—is true, it describes what is the case. The simple object that constitutes the meaning of the name ‘red’, say, is a constituent of the state of affairs described by the proposition, insofar as it is a common constituent of a class of states of affairs described by means of propositions that contain the name ‘red’ as an element. To say that the object for which the word ‘red’ stands is a constituent of an existing state of affairs is just to say that the state of affairs is correctly described by means of a proposition in which the word ‘red’ occurs. If the state of affairs does not exist, the simple sign does not lose its meaning. Similarly, for expressions that give spatio-temporal coordinates, or the distribution of material points: it is the system of representation that gives these elements of representation their meaning, not a direct correlation between a name and an object. Sense is determinate insofar as there are primitive signs whose meaning is determined by their place in a system of representation that stands in a projective relation to the world. By putting these primitive signs in determinate combination with one another we describe, independently of the truth of any proposition, a state of affairs that either exists or does not exist.¹¹

On this interpretation, Wittgenstein’s conception of the meaning of a simple sign does not involve him in postulating a link between words and bits of an independently constituted world. This is not to claim that his commitment to simple signs is not dogmatic, for he is clearly committed to the claim that the world is completely describable by means of elementary propositions that are combinations of simple names. However, the link between a simple name and what it stands for is internal to the system of representation, insofar as it stands in a projective relation to the world, that is, insofar as it can be used on particular occasions in propositions that say how things are.

of this explicit in the *Tractatus* reflects the fact that his principal concern is with the logic of depiction and the status of logic, and not with the actual analysis of the propositions of ordinary language. It is clear, furthermore, that Wittgenstein’s reasons for asserting that there must be elementary propositions have, as Anscombe observes in response to Popper’s empiricist interpretation of the *Tractatus*, nothing to do with epistemology and everything to do with the requirements of logic (see Anscombe, 1971, p.28).

¹¹ This interpretation comes close to McGuinness’s view that ‘[a]n object in the *Tractatus* which is the reference of a name or simple sign can be viewed as simply the truth-value potential of a certain expression. The semantic role of the supposedly possible simple sign or name is that of being combined with other simple signs or names to produce a proposition having a truth-value’ (McGuinness, 1981/2002, p.87).

The commitment to simple objects should not, therefore, be understood as a speculative claim about the essential structure of the world conceived independently of its representation in propositions. The commitment emerges, rather, in the course of an attempt to clarify what is essential to a system in which we can express propositions that are true or false. It is the essential structure of the system itself, and not of what lies outside it, that he is investigating. The element of dogmatism in his reflections is, nevertheless, apparent.

Thus, it is clear that Wittgenstein is committed to what is, in essence, a hypothetical claim about the possibility of a certain sort of analysis of the sense of the propositions of ordinary language. It is, as Cora Diamond suggests, in this sense that Wittgenstein's early work contains a form of metaphysics. Thus, we must make a distinction 'between metaphysics of the sort the *Tractatus* does not contain, although it works by using sentences that look like that sort of metaphysics, and the metaphysics that it does contain: the 'must' of logical analysis, of total determinacy of sense' (Diamond, 1991a, p.20). Wittgenstein is driven by his conviction concerning the determinacy of sense and what it requires of language, and by his primitive idea of meaning as something that is correlated with a word, into making claims about the possibility of analysis and about what the end of analysis must be. However, all of these claims concern the form and nature of our system for representing possible states of affairs, and do not involve speculation about what must be the case in a realm outside language.¹²

8. It is clear that the propositions of ordinary language do not, as they stand, meet Wittgenstein's demand for indefinable constituent expressions, that is, for simple names that stand for objects that cannot be described in a proposition. However, as we've just seen, Wittgenstein holds that the thoughts that we use the propositions of ordinary language to express are logical pictures with a determinate sense, that is, they represent particular states of affairs. Thus, the thought that we express, on a particular occasion, by means of a proposition of ordinary language must meet the demands that arise out of the requirement that sense is determinate. The thought is the 'pure intermediary between the propositional *signs* and the facts'. The thoughts that we express with the propositions of ordinary language already contain

¹² The metaphysics that Diamond finds in the *Tractatus* 'is not a view about what there is external to language or thought, but about what they essentially are (despite appearances), and about what we can do, what it must be possible to do' (Diamond, Introduction to 1991a, p.18).

everything that can be brought out by means of analysis of the ordinary propositions that we use to express them.¹³ Everything that is logically entailed by a thought must, Wittgenstein holds, be involved in thinking it. That is to say, everything that is essential to our using a proposition to express a sense must be internal to the thought that we express by means of it and it can be made completely explicit by means of analysis.

Characterizing his early view in the *Investigations*, Wittgenstein writes:

“Thought must be something unique”, when we say, and *mean* that such-and-such is the case, we—and our meaning—do not stop anywhere short of the fact; but we mean: *this-is-so*. (*PI* 95)

Wittgenstein makes the same point in the *Notebooks* as follows:

I tell someone ‘The watch is lying on the table’ and now he says: ‘Yes, but if the watch were in such-and-such a position would you still say it was lying on the table?’ And I should become uncertain. This shows that I did not know what I meant by “lying” *in general*. If someone were to drive me into a corner in this way in order to show that I did not know what I meant, I should say: ‘I *know* what I mean; I mean just THIS’, pointing to the appropriate complex with my finger. (*NB*, p.70)

The propositional sign that I use to express my thought can be used, on different occasions, to express any number of distinct, determinate thoughts. It is for this reason, Wittgenstein suggests, that we know that the expressions that occur in the propositions of ordinary language stand for complexes. On a particular occasion of using a sentence of ordinary language, such as ‘My watch is lying on the table’, the sense that they express is completely determinate and is perspicuously expressed only in a fully analysed proposition whose constituent expressions are indefinable. When we use a proposition of ordinary language to say something ‘[t]here is enormously much added in thought to each proposition and not said’ (*NB*, p.70), so that in application the sense of the proposition is clear and sharp and independent of the truth or falsity of any proposition. Thus, we are able to say, whatever is the case, whether the proposition is true or false. Clearly, watches and tables and their relative spatial position will no longer be mentioned in these fully analysed propositions. However, the definitions that connect the surface proposition with its analysis means that there is a form and content that corresponds to the words

¹³ Winch also emphasizes the link between Wittgenstein’s concept of a thought and ‘the logical conception of *analysis* of propositions which displays them as truth-functions of elementary propositions’ (Winch, 1987, p.16).

'watch' and 'table' in the fully analysed proposition. The form is common to all propositions that contain these expressions for complexes; it is because, on a particular occasion of use, a content has this form that the ordinary proposition can be used as an expression of its sense.

We have now moved some way beyond the innocuous thought that on particular occasions we use the propositions of ordinary language in their projective relation to the world to describe specific states of affairs as we imagine them. The idea is that the thoughts we use the propositions of ordinary language to express are determinate, not simply in the sense that they represent particular states of affairs, but in the sense that the state of affairs that they represent is completely specified: everything that is logically entailed by the thought is part of its content. Thus, the sense of the proposition that is expressed by a propositional sign on a particular occasion of its use is completely clear and explicit. Insofar as thoughts are determinate, they are perspicuously expressed only in propositions whose constituents are simple, indefinable signs that cannot be further analysed. Again, it is impossible not to recognize, as Wittgenstein himself does in his commentary on his own early work, that he here betrays his descriptive conception of philosophy and engages in full-blooded philosophical claims about what must be the case. However, I've suggested that, despite the dogmatism, we can still understand how Wittgenstein sees himself as doing nothing more than revealing the logical structure that is essential to anything's being a logical picture, and thus to our representing states of affairs in the way that we do. In this way we can still understand how Wittgenstein conceived his task to be one of allowing propositions themselves (or his idealized conception of them) to make clear how they express their sense.

In the spirit of this general approach, I want to suggest that we should see Wittgenstein's appeal to thoughts with a determinate sense, lying behind our use of the propositions of ordinary language, as a way of squaring his own preconception of the logical order that must be there in ordinary language with the surface phenomena. The idea that this logical order is already there in the thoughts that we use the sentences of ordinary language to express is encouraged by the reflection that he is concerned with *logical* analysis, and therefore with something that must be grasped by anyone who understands these thoughts: 'If we know on purely logical grounds that there must be elementary propositions, then everyone who understands propositions in their unanalysed form must know it' (*TLP* 5.5562). There is certainly a degree of psychologism in this: the idea that there is a system of logically structured thoughts lying behind the signs that we use to express them. However, there is

no grounding for the idea that the constituents of thoughts must be the equivalent of simple signs other than that which arises out of the logical requirement that sense is determinate. There is, as I have just remarked, a sense in which his views must be regarded as metaphysical and dogmatic, but this sense is compatible with the idea that Wittgenstein is engaged in a task of clarifying the logical order that he believes must be there in language, or indeed any system of representation, insofar as it stands to the world in the internal relation of depicting. This logical order is one that can be rendered explicit through a process of analysis of the thoughts that we express; it does not involve a hypothesis about the intrinsic nature of an independent reality.¹⁴

At *TLP* 3.2–3.203, Wittgenstein writes:

In a proposition a thought can be expressed in such a way that elements of the propositional sign correspond to the objects of thought.

I call such elements ‘simple signs’, and such a proposition ‘completely analysed’.

The simple signs employed in propositions are called names.

A name means an object. The object is its meaning. (‘*A*’ is the same sign as ‘*A*’.)

A fully analysed proposition is a perspicuous representation of the determinate thought that it expresses; analysis uncovers the logical structure of the thought that is expressed by a propositional sign that is ‘applied and thought out’ (*TLP* 3.5). In a fully analysed proposition all signs for complexes have been replaced by propositions that describe those complexes completely. The only words that occur in fully analysed propositions are names, each of which has a meaning that is determined by its place in the system of representation. The reflections that Wittgenstein goes on to make concerning the nature of propositions are directed at this idealized conception of fully analysed propositions and the system of representation to which they essentially belong.

¹⁴ It could be argued that there are two conceptions of understanding in the *Tractatus* that mirror the two conceptions of meaning: meaning as something correlated with a word and meaning as use in propositions with sense. There is the conception of understanding as mastery of the system of language (a dynamic conception) and the conception of understanding as a state of grasping the sense of a proposition, which is held to accompany the utterance of a propositional sign (a static conception). Like the two conceptions of meaning, these two conceptions of understanding are in tension with one another, and in the later philosophy Wittgenstein sets out to liberate us from what he comes to see as the illusion of the static conception. Stephen Hilmy (Hilmy, 1987, chapter 2) makes the same connection between the early Wittgenstein’s idea of understanding as a ‘pneumatic state’ and his inclination to look for ‘a pure, abstract, general conception of language (propositions, words)’ (Hilmy, 187, p.64). However, Hilmy connects these ideas with ‘Wittgenstein’s early philosophical attempt to *explain* language’ (Hilmy, 1987, p.71), whereas I’ve tried to argue that, although they do involve Wittgenstein in a hypothetical claim about the possibility of analysis, they arise out of the requirement that sense be determinate.

The final sentence of *TLP* 3.203, (“*A*” is the same sign as “*A*”), makes it clear that names cannot be defined by means of descriptions: ‘*A*’ is a logically simple symbol and no kind of implicit composition, to be revealed by analysis, is essential to the sign’s logical role. However, it should be clear from what has gone before that we should understand Wittgenstein’s statement that a name means an object as a description of the logical role that the constituents of propositions have in a system of representation. The meaning of a name cannot be separated from the idea of a symbol that makes a common contribution to a class of propositions with sense. Indeed, the final sentence of *TLP* 3.203 can also be read as making this point. This can be seen more clearly in Wittgenstein’s original statement of the point in ‘Notes on Logic’: ‘It is to be remembered that names are not things but classes: “*A*” is the same letter as “*A*”’ (NL, p.104). Thus a name does not become a symbol that stands for an object by virtue of its use on one occasion, but the symbol is identified as a class of expressions that make a common contribution to the sense of the class of propositions in which it occurs. Wittgenstein makes the point explicitly in the *Tractatus* as follows:

In a proposition a name is the representative of an object. (*TLP* 3.22)

Only propositions have sense; only in the nexus of a proposition does a name have meaning. (*TLP* 3.3)

Insofar as a proposition is a proposition only in the context of a system of representation that exists in a projective relation to the world, it follows that a name is a name only in virtue of its logical role in a system for representing possible states of affairs.

9. Wittgenstein’s motivation for holding that there must be simple signs is the idea that we can understand a proposition we have never seen before only insofar as a proposition ‘use[s] old expressions to communicate a new sense’ (*TLP* 4.03). Thus, a proposition ‘is understood by anyone who understands its constituents’ (*TLP* 4.024). I suggested earlier that we should understand Wittgenstein as holding that propositions contain two kinds of names: names of the form ‘*a*’, ‘*b*’, ‘*c*’, and so on and functions of these (‘*Fx*’, ‘*xRy*’, etc). The meaning of these primitive signs must be explained to us: ‘The meanings of simple signs (words) must be explained to us if we are to understand them’ (*TLP* 4.026). At *TLP* 3.263, Wittgenstein spells out what is involved in the explanation of the meaning of primitive signs as follows:

The meanings of primitive signs can be explained by means of elucidations (*Erläuterungen*). Elucidations are propositions that contain the primitive signs. So they can only be understood if the meanings (*Bedeutungen*) of the signs are already known.

The remark is not transparent and we are obliged to offer an interpretation of it. One thing that seems clear is that Wittgenstein is once again rejecting the idea that primitive signs can be given a meaning directly, that is, independently of their use in propositions. Elucidations are genuine propositions that have the primitive sign, whose meaning is to be explained, as a constituent. There is, in other words, no possibility of getting outside the symbolism: all explanations of meaning take place in language. If this is so, then clearly that rules out the possibility of understanding the final sentence of *TLP* 3.263 in a way which requires us to have grasped what a sign stands for independently of grasping how it is to be used in propositions. Thus, what must already be known or familiar to us is what kind of symbol the primitive sign is, that is, we must already grasp what kind of symbol the sign whose meaning is being explained is.¹⁵ What an elucidation shows is everything that is arbitrary in the symbol; everything that is essential to its symbolizing in the way that it does must already have been grasped. Thus, the place for a primitive sign in the symbolism must already be clear if we are to grasp the meaning of a primitive sign by means of an elucidation. Although Wittgenstein gives no examples of elementary propositions or simple names, let us suppose that one form of elementary proposition consists of a function of names of colours and names of spatio-temporal coordinates 'Blue at x, y, z, t '. The suggestion of *TLP* 3.263 is that we cannot give a definition, for example, of a name of a colour, say, 'blue', but we can give an elucidation of it by means of elementary propositions that contain it. A speaker is in a position to understand the elucidation 'Blue at x, y, z, t ', where x, y, z , and t stand for spatial and temporal coordinates respectively, only if he has already grasped the overall role of colour words in propositions. Thus, the speaker must already be able to do something in order to be able to learn the meaning of a sign by means of an elucidation. In the *Tractatus*, Wittgenstein does not consider the question of how a speaker acquires the abilities that are presupposed if he is to come to understand the meaning of a primitive sign on the basis of an elucidation. However, it is clear that he holds that there is nothing that explains a speaker's ability to use a word; the ability has rather to be presupposed in any explanation of meaning.

Some support for this interpretation of *TLP* 3.263 can be derived from the remarks that precede it and with which it is numerically linked. We've already been over these remarks in some detail, but it is worth looking at them again in the context of a discussion of *TLP* 3.263. At *TLP* 3.26, Wittgenstein states

¹⁵ A similar reading of *TLP* 3.263 is put forward by Winch. See P. Winch, 1987, p.11.

that a name is a primitive sign that ‘cannot be dissected any further by means of a definition’. He then remarks, as a comment on *TLP* 3.26, that no sign that is primitive can signify in the same manner as a sign that is defined by means of primitive signs: ‘Names *cannot* be anatomized by means of definitions.’ And as we saw, he goes on: ‘(Nor can any sign that has meaning independently and on its own)’. I took this to mean any sign whose meaning does not depend upon the meaning of its parts and to cover functions (the ‘general indefinables’) as well as names of the form ‘*a*’, ‘*b*’, ‘*c*’, and so on. Thus, we’re concerned with the basic indefinables—the simple names—out of which all complex expressions (i.e. propositions) are composed.

Wittgenstein now goes on to make a further comment on *TLP* 3.26:

What signs fail to express, their application shows. What signs slur over, their application says clearly. (*TLP* 3.262)

Given that this is a direct comment on *TLP* 3.26, it seems reasonable to suggest that Wittgenstein is pointing out that although the meaning of a primitive sign cannot be given by means of a definition, its application makes its meaning clear: what we cannot express by means of signs, the sign itself makes manifest in its application or use. *TLP* 3.263 is Wittgenstein’s third comment on *TLP* 3.26, and it now seems reasonable to hold that the elucidations that are directed at explaining the meaning of a primitive sign have to take for granted what the application of the sign shows, namely what kind of symbol the sign is, or how the sign is used in propositions with sense. What we explain by means of an elucidation is the meaning of a particular sign whose overall use in propositions is already understood; the application that is to be made of the sign must already have been grasped.

It is clear from all this how very little work is done by the idea that the meaning of a word is the object that is correlated with it in Wittgenstein’s overall conception of how language functions. As the *Tractatus* progresses, the notion of the meaning of a sign as something that is correlated with it ceases to play a role, and Wittgenstein explicitly works exclusively with the more fundamental idea of the use of expressions in propositions with sense. As I remarked earlier, Wittgenstein’s conception of use in the *Tractatus* is restricted to the idea of use of expression in propositions that picture what is the case. It is clear, however, that this strand in Wittgenstein’s early thought is the real achievement of the work. It is this strand that evolves and is developed in the later philosophy and it is what ultimately enables him to recognize the emptiness of the primitive idea of meaning as something that is correlated

with a word. Thus, we should recognize it as the root of the correcting voice in the opening dialogue of the *Investigations*, which opposes Augustine's naive conception of meaning by asking us to attend to how speakers operate with words.

10. I have been taking it for granted in the above discussion that when we use a proposition on a particular occasion to say how things are, the sense of the proposition is determinate, that is, that on a particular occasion of use, I use a propositional sign to represent a determinate state of affairs (I mean: *this-is-so*). However, at *TLP* 3.24, Wittgenstein makes a series of comments in which he seems to suggest that propositions that contain a sign that stands for a complex have an indeterminate sense:

A proposition about a complex stands in an internal relation to a proposition about a constituent of the complex.

A complex can be given only by its description, which will be right or wrong. A proposition that mentions a complex will not be nonsensical, if the complex does not exist, but simply false.

When a propositional element signifies a complex, this can be seen from an indeterminateness in the proposition in which it occurs. In such cases we *know* that the proposition leaves something undetermined. (In fact the notation for generality *contains* a prototype.)

The contraction of a symbol for a complex into a simple symbol can be expressed in a definition.

According to the third paragraph of this remark, the occurrence of a propositional element standing for a complex is indicated by an 'indeterminateness' in the proposition in which it occurs. What is it that we 'know' a proposition containing a propositional element standing for a complex leaves undetermined? How does this fit with the idea that the thought that is expressed by a propositional sign on a particular occasion of use is a logical picture with a determinate sense?

In her discussion of *TLP* 3.24, Anscombe suggests that one way to understand what the indeterminateness of a proposition containing a sign for a complex amounts to is that there is more than one way for the proposition to be false: 'the complex might exist, but what was said of it might not hold; or the complex might not exist' (Anscombe, 1971, p.34). However, she argues that the possibility for more than one way of being false is not what Wittgenstein principally has in mind: 'What he principally had in mind was the sort of proposition where there is a variety of ways for the proposition to be true' (Anscombe, 1971, p.34). Thus, she connects the indeterminateness referred

to in the third paragraph of *TLP* 3.24 with the fact that the propositions expressed by the sentences of ordinary language can be made true by a variety of distinct possible states of affairs. She writes:

Take for example ‘My watch is lying on the table’, which Wittgenstein considers in his notebooks. There are hundreds of different, more minutely statable, and incompatible states of affairs which would make that proposition true. (Anscombe, 1971, p.35)

On this interpretation, the proposition expressed by a sentence of ordinary language, such as ‘My watch is lying on the table’, is essentially indeterminate. These propositions, it is argued, are indeterminate insofar as they can be made true by any one of a large range of possible, determinate states of affairs. According to Anscombe, a determinate thought—i.e. a determinate proposition—only comes into view when we have arrived at elementary propositions that ‘will have only one state of affairs that will make [them] true’ (Anscombe, 1971, p.35). The propositions expressed by the sentences of ordinary language are essentially equivalent to general propositions that state that one of these more minutely statable states of affairs exists. The general proposition is equivalent to a disjunction of elementary propositions, which are composed of simple, indefinable expressions, and each of which has exactly one way of being true and one way of being false. The general proposition is a complete picture of reality, but an indeterminacy arises insofar as it leaves open which one of a class of possible, determinate states of affairs obtains.

There is, however, a difficulty with Anscombe’s interpretation of *TLP* 3.24. Anscombe is committed to holding that a proposition of ordinary language, such as ‘My watch is lying on the table’, is doomed to express an indeterminate sense. It is only elementary propositions, in which “‘everything’ [is] settled . . . —i.e. nothing [is] left open’ (Anscombe, 1971, p.35), that can be used to describe a particular, determinate state of affairs. On this understanding, the relation between the indeterminate (essentially disjunctive) propositions of ordinary language and elementary propositions with a determinate sense is such that, although the latter occur in the analysis of the former, no proposition of ordinary language is itself ever used to represent a particular, determinate state of affairs. At *TLP* 3.2, Wittgenstein describes a completely analysed proposition as one in which ‘the elements of the propositional sign correspond to the objects of thought’. Such a propositional sign will, according to Anscombe, consist of a disjunction of elementary propositions. The thought expressed by each of the disjuncts will be absolutely determinate; the

thought expressed by the original proposition is indeterminate insofar as it is equivalent to a disjunction of these.

Thus, on Anscombe's interpretation, the determinate thoughts that lie at the end point of analysis await expression in a logically perspicuous language in which the propositional constituents correspond to logically primitive expressions. It is as if we can think particular, determinate thoughts, but a determinate thought cannot constitute the sense of any proposition that we express by means of a propositional sign of ordinary language. When it comes to speaking our thoughts aloud, we are condemned to express them in propositions that have an indeterminate sense, that is, in propositions that are equivalent to disjunctions of propositions with a determinate sense. If we think of the indeterminateness of the surface proposition as arising from its equivalence to a disjunction of the descriptions of the 'more minutely stable, and incompatible states of affairs which would make [it] true', then we're committed to holding that the disjunct that makes it true on a particular occasion can be thought, but cannot be expressed in a proposition of ordinary language. It is not only that there is something intrinsically unsatisfactory in the idea that a proposition of ordinary language is made true by a state of affairs that cannot be represented by any sentence of ordinary language, but the view that Anscombe attributes to Wittgenstein is at odds with his conception of how the sense of a proposition is determined on a particular occasion of use.

11. I suggested earlier that Wittgenstein holds the view that the propositions of ordinary language have a sense only on particular occasions of use. It is true that the propositional sign, 'My watch is lying on the table', can be used on different occasions to express quite different thoughts, but I have argued that on a particular occasion of its use, it can be used to express a determinate thought or to represent a particular state of affairs. On a particular occasion of use, the sense of 'My watch is lying on the table' is not given by a disjunction of elementary propositions, but by a complete description of a state of affairs as I imagine it. As it is used on a particular occasion to express a thought, there is one way for the proposition expressed by 'My watch is lying on the table' to be true and one way for it to be false. On this understanding, the propositions that we express by means of the sentences of ordinary language are not, as they are for Anscombe, essentially general, or essentially equivalent to a disjunction of elementary propositions. However, the ordinary language sentence that we use, on a particular occasion, to express a determinate thought disguises the form of the thought that it is used to express: 'it is impossible to infer [from

the sentence] the form of the thought beneath it' (*TLP* 4.002). The task of analysis is to replace the ordinary language sentence by a sentence whose logical structure mirrors the logical structure of the thought that the original sentence is used to express. Thus, the analysis of a proposition of ordinary language, as it is used on a particular occasion, is not a matter of explicating the disjunction of determinate thoughts that constitutes its essentially general or indeterminate sense. Rather it is a matter of replacing a misleading propositional sign, which disguises the form of the determinate thought it expresses, by a clear one, which reveals it.

The above interpretation gives us a much more natural reading of *TLP* 3.201:

In a proposition a thought can be expressed in such a way that elements of the propositional sign correspond to the objects of the thought.

I call such elements 'simple signs', and such a proposition 'completely analysed'.

But how is this conception of analysis to be squared with *TLP* 3.24? I think that Anscombe is clearly correct when she suggests that the sort of indeterminateness that Wittgenstein has in mind here is the possibility of using a sentence of ordinary language, such as 'My watch is lying on the table', to represent hundreds of different possible states of affairs. However, I think it is a mistake to think that, on any occasion of using the sentence, the sense of the sentence is given by means of a disjunction of the descriptions of all the possible states of affairs that could make the proposition true, each disjunct of which consists of a conjunction of elementary propositions with a determinate sense. Rather, we should think of our mastery of the ordinary language sentence in which a sign for a complex occurs as grasp of the form of the proposition that would replace it on analysis. It is in this sense that the proposition 'contains a prototype'—something that is not yet an expression with sense—which specifies the form of the proposition that the sentence can be used to express, but not its sense. The form or prototype can be described by a general proposition: $(Ex, Ey)xRy$. However, on a particular occasion of using the ordinary language sentence to express a thought, the variable signs of the prototype are replaced by constants and the speaker uses the resulting proposition to assert that a determinate possible state of affairs exists: 'A propositional sign, applied and thought out, is a thought' (*TLP* 3.5). The thought expressed belongs to the class of propositions that are the values of the prototype; it is one of a large class of propositions with sense (thoughts) that the original propositional sign can be used to express. What needs to

be determined is a particular value of the prototype, and that is something that is done by replacing variables with constants. Thus, the prototype that is associated with a particular sign for a complex in a proposition of ordinary language, will, on a particular occasion of using that proposition to represent a state of affairs, be replaced by a determinate conjunction of elementary propositions that describes that state of affairs completely.

Thus, we can see that the expressions that occur in the propositions of ordinary language stand for complexes, insofar as our understanding of them is expressed by means of a proposition that contains a prototype: $(Ex, Ey)xRy$. Thus, we understand that we can use them on different occasions to represent different states of affairs. However, what the propositional signs of ordinary language leave undetermined is made determinate on a particular occasion, when we 'think out' the propositional sign (i.e. replace the variables in the prototype with simple signs) and apply it to a particular state of affairs, as we imagine it. The sign for a complex in the original propositional sign, which corresponds to a general prototype, $(Ex, Ey)xRy$, will be replaced, on analysis, by an elementary proposition that describes a determinate state of affairs. The elementary propositions that are the values of the prototypes constitute a contextual definition of the original sign for a complex. In the propositional sign that I use to express my thought in ordinary language, these definitions are contracted into simple signs ('my watch', 'the table', 'lying on'), and thus the surface form of the sentence disguises the form of the thought that it is used to express. The simple signs that occur in the propositions of ordinary language disappear on analysis and are replaced by elementary propositions that describe the corresponding complex completely. Thus, the thought that is expressed by a proposition containing a sign for a complex will be analysable into a proposition that describes the complex and a statement about its constituents.

Wittgenstein expresses this conception of analysis clearly at *TLP* 2.0201:

Every statement about complexes can be resolved into a statement about their constituents and into propositions that describe the complexes completely.

A statement about complexes will be analysed into propositions that describe those complexes and a statement about the objects that are constituents of those complexes. Hence there is an internal relation between a proposition that contains a sign that stands for a complex and a proposition about its constituents: the latter occurs in the analysis of sense of the former. The elementary propositions that occur in the fully analysed proposition will have

only simple symbols, that is, indefinables, as their constituents. The sense of these propositions is determinate in the sense that there is nothing more that needs to be determined in order for the speaker to compare these propositions with reality for truth or falsity.

12. Thus, Wittgenstein is committed to the possibility of a clear and precise expression of the sense of a proposition. For each proposition that we express, there will be an analysis that expresses that sense clearly and perspicuously: 'Everything that can be thought can be thought clearly. Everything that can be put into words can be put clearly' (*TLP* 4.116).¹⁶ The defect of ordinary language is not that it cannot express the determinate thoughts that we have, but that it does not express them perspicuously:

Language disguises thought. So much so, that from the outward form of the clothing it is impossible to infer the form of the thought beneath it, because the outward form of the clothing is not designed to reveal the form of the body, but for entirely different purposes. (*TLP* 4.002)

Analysis is needed if the thought that the proposition expresses, and thus its sense, is to be expressed in such a way that the elements of the propositional sign correspond to the objects of thought. The following remarks should therefore be understood to characterize the sense of a proposition of ordinary language when it is used on a particular occasion to say how things are:

A proposition has one and only one complete analysis.

What a proposition expresses it expresses in a determinate manner, which can be set out clearly, a proposition is articulate. (*TLP* 3.25–3.251)

A proposition that leaves something undetermined is not (yet) a proposition with sense. It awaits an application in which it is used to express a determinate thought. Such a proposition does not contain its sense, but it does contain the possibility of expressing it (*TLP* 3.13).

¹⁶ In the *Philosophical Grammar*, Wittgenstein writes:

Formerly, I myself spoke of a 'complete analysis', and I used to believe that philosophy had to give a definitive dissection of propositions so as to set out clearly all their connections and remove all possibilities of misunderstanding. I spoke as if there was a calculus in which such a dissection would be possible. I vaguely had in mind something like the definition that Russell had given for the definite article, and I used to think that in a similar way one would be able to use visual impressions etc. to define the concept say of a sphere, and thus exhibit once and for all the connections between the concepts and lay bare the source of all misunderstandings, etc. At the root of all this there was a false and idealized picture of the use of language. (*PG*, p.211).

On this interpretation, we use the propositions of ordinary language on particular occasions to express a determinate sense that is perspicuously represented as a conjunction, rather than a disjunction, of elementary propositions.¹⁷ Thus, the propositions of ordinary language, as they are used on an occasion to say something, are logical pictures. It is in virtue of being a logical picture that a proposition, as it is applied on a particular occasion, expresses a sense. We can read off from the fully analysed proposition that perspicuously expresses this sense the determinate state of affairs that the proposition represents. As we saw earlier, the essential idea of a logical picture is that there is nothing in common between the picture and the state of affairs it represents, over and above what is common to all pictures that can represent that state of affairs. Wittgenstein makes the point clearly at *TLP* 3.34–3.341:

A proposition possesses essential and accidental features.

Accidental features are those that result from the particular way in which the propositional sign is produced. Essential features are those without which the proposition could not express its sense.

So what is essential in a proposition is what all propositions that can express the same sense have in common.

And similarly, in general, what is essential in a symbol is what all symbols that can serve the same purpose have in common.

Thus, a symbol signifies what it does in virtue of its logical properties, that is, in virtue of those properties that are common to any symbol that can serve the same purpose.

We've already seen that it is essential to a proposition's expressing a sense that it is logically articulate and that the logically simple constituents of a fully analysed proposition constitute the basic indefinables. A fully analysed proposition is one in which the structure of the proposition mirrors the structure of the thought that it expresses. The structure of the thought is the logical articulation that is essential to any sign's expressing this sense. The logical structure that is essential to the thought's expressing its sense is preserved in the structure of what is projected, namely the state of affairs it represents. Thus, there must be exactly as many logically simple parts in a fully analysed proposition as there are in the state of affairs that it represents:

¹⁷ In Moore's notes on Wittgenstein's lectures 1930–3, Moore reports Wittgenstein's account of his early idea of analysis as follows: 'He said that both he and Russell had the idea that non-atomic propositions could be "analysed" into atomic ones, but that we did not yet know what the analysis was: that, e.g., such a proposition as "It is raining" might, if we knew its analysis, turn out to be molecular, consisting, e.g., of a conjunction of "atomic" propositions' (*PO*, p.88).

In a proposition there must be exactly as many distinguishable parts as in the situation it represents.

The two must possess the same logical (mathematical) multiplicity. (*TLP* 4.04)

On this interpretation, this idea does not represent an external constraint on language. It is rather a reflection, on the one hand, of the internal relation that exists between language and the reality that it depicts, and on the other, of what is essential to any proposition's expressing the sense that it does. The logical multiplicity of a fully analysed proposition—that is to say, the number of logically distinguishable parts—is determined insofar as it is part of what is essential to its expressing its sense: all propositions that can be used to represent a particular state of affairs must share this logical multiplicity. If there are elementary propositions of the form '*aRb*', then any symbol that represents the state of affairs that is represented by '*aRb*' will have parts that correspond to '*a*', '*b*', and '*xRy*'. The logical articulation of the state of affairs is mirrored in the essential logical articulation of any symbol that represents it.¹⁸

Wittgenstein calls each logically articulated part or constituent of a proposition a symbol. At *TLP* 3.31, Wittgenstein writes:

I call any part of a proposition that characterizes its sense an expression (or a symbol).

(A proposition is itself an expression.)

Everything essential to their sense that propositions can have in common with one another is an expression.

An expression is the mark of a form and a content.

¹⁸ In the *Notebooks* (9.5.15), Wittgenstein writes: 'When the proposition is just as complex as its reference, then it is *completely* analysed' (*NB*, p.46). The notion of the 'reference' of a proposition has disappeared in the *Tractatus*. Complete analysis aims at a logically perspicuous representation of its sense, i.e. at making clear the (underlying) structure that is essential to its expressing the sense it does and which makes its position in logical space completely clear. This idea is also expressed in the *Notebooks*, for example:

The sense of the proposition must appear in the proposition as divided into its simple components.—And these parts are then actually indivisible, for further divided they just would not be *THESE*. In other words, the proposition can then no longer be *replaced* by one that has more components, but any that has more components also does not have *this* sense. When the sense of the proposition is completely expressed in the proposition itself, the proposition is always divided into its simple components—no further division is possible and an apparent one if superfluous—and these are objects in the original sense. If the complexity of an object is definitive of the sense of the proposition, then it must be portrayed in the proposition to the extent that it does determine the sense. And to the extent that its composition is *not* definitive of *this* sense, to this extent the objects of this proposition are *simple*. They *cannot* be further divided.—The demand for simple things *is* the demand for definiteness of sense. (*NB*, p.63).

In the *Notebooks*, Wittgenstein gives expression to these two trains of thought, each of which is in tension with the other. In the *Tractatus*, it is clear that the idea of analysis as analysis of the *sense* of a proposition has completely taken over.

An expression is a sign that makes a common contribution to a class of propositions, within a system of representation that stands in a projective relation to the world. The form of an expression is what it shares with every symbol that can be substituted for it in propositions with sense. The form of an expression is equivalent to the logico-syntactic properties without which it could not signify in the way that it does. The content of an expression is the meaning that arbitrary conventions have assigned to this particular symbol.

A symbol or expression is a common characteristic of a class of propositions with sense. A symbol signifies what it does only within a system of representation. Thus:

An expression presupposes the forms of all the propositions in which it can occur. It is the common characteristic mark of a class of propositions. (*TLP* 3.311)

An expression is presented or described by ‘the general form of the propositions that it characterizes’ (*TLP* 3.312). That is to say, all expressions are ‘presented by means of a variable whose values are the propositions that contain the expression’ (*TLP* 3.313). Wittgenstein calls these variables ‘propositional variables’. The propositional variable is arrived at by starting with a proposition in which the expression occurs, then, keeping the expression itself constant, replacing all the other expressions in the proposition by variables. There is a class of propositions all of which are values of the resulting variable proposition and within which the expression can be seen to make a common contribution to their sense. A proposition is a limiting case in which everything that occurs is a constant and nothing is variable. It is a limiting case insofar as it is essentially composed of expressions that it has in common with other propositions; it is not itself a common characteristic of a class of propositions, but it essentially has characteristics in common with the members of a class of propositions. Thus, Wittgenstein makes it clear once again that ‘an expression has meaning only in a proposition’ (*TLP* 3.314); it is only in the context of a system of representation that a sign is a symbol. To grasp the meaning of an expression is to grasp the rule for its use in propositions, that is, to grasp the contribution that it makes to determining the place of a logical picture in logical space.

13. At the beginning of the previous chapter I characterized part of Wittgenstein’s task of clarification as follows: he must make clear how a proposition expresses its sense; he must make clear the logical distinction between names and propositions and show how names combine in propositions to express a sense. It is important, of course, that these tasks are not independent

of one another; one can be accomplished only if they all are. The current chapter has tried to show how Wittgenstein achieves the aim of clarification that he has set himself. Thus, his logical investigation of the essence of logical pictures has achieved what he believes Frege and Russell never achieved: it has made clear the logical distinctions that Frege and Russell left obscure. One of the central aims of the current interpretation of the *Tractatus* is that it should enable us to understand how Wittgenstein could have taken himself to be engaged in a project of clarification. The aim has been achieved to the extent that it is now clear that Wittgenstein sees himself as simply laying bare the system of language as it exists in a projective relation to the world. A proposition is essentially a place in a logical space that exists independently of the existence or non-existence of any particular state of affairs. It is only by viewing propositions as a place in logical space, that is, as part of a system of representation that exists in a projective relation to the world, that we can come to see clearly how it expresses its sense, make clear the distinction between propositions and names, and show how names combine in propositions. The next stage in the investigation is to make perspicuous how one proposition occurs in another, the relation between propositions with sense and the propositions of logic, and the nature of the relation between propositions that enables us to infer one from the other. However, before we move on to that, we must return to the opening of the *Tractatus* and show how the current interpretation suggests that these remarks should be read.

6

The Opening of the *Tractatus*

1. There is a great temptation to read the opening remarks of the *Tractatus* as a statement of Wittgenstein's fundamental ontology. Many interpreters of the work have been inclined to take these remarks at face value. Thus, Max Black writes:

Wittgenstein's conception of philosophy of language (the search for its essence) required a stand on ontological issues: anyone who hopes to delineate a *Begriffsschrift* that adequately manifests the grain of reality must have at least some schematic view concerning the true structure of thought and its true, if hidden, connection with reality; for how is one to distinguish the "accidental" from the "essential" features of language except in terms of prior notions of what reality is really like. (Black, 1964, p.7)

Jaakko Hintikka also holds that:

Wittgenstein begins [the *Tractatus*] by sketching a general view of the structure of the world, language, and thought, including their relation to each other. (Hintikka, 2000, p.12)

Peter Hacker speaks of 'the metaphysical or ontological remarks with which the book opens' and argues that the *Tractatus* 'was a metaphysical vision par excellence' (Hacker, 2005, p.253). He describes Wittgenstein's view as follows:

[T]he world had an essential nature, which could be uncovered only by logical analysis; logic, that is the logical forms of thought and language, represented the a priori order of the world, the order of possibilities common to both thought and the world, the forms of all things. (Hacker, 2005, p.253)

David Pears make the same point as follows:

[T]he essential structure of our language is imposed on it by the ultimate structure of reality, which is a grid with simple objects at its nodal points. (Pears, 1987, p.28)

On this reading of the opening of the work, Wittgenstein is held to ground the essence of language in the essence of the world, which is conceived to be independent of our means of representing it. These interpreters acknowledge that Wittgenstein is obliged to deduce the necessary features of the world indirectly, via an investigation of what is essential to any symbolism in which the world is represented. However, it is argued that the metaphysical picture that he thereby arrives at is intended to show that the ground of the logic of our language lies in the essential structure of an independent reality. Thus, the essence of language is held to be a reflection of the essence that reality has prior to, and independently of, the construction of a language that describes it. However, it is also accepted that Wittgenstein's attitude towards this conception of the relation between our language and the reality it represents is problematic. For one of the consequences of Wittgenstein's conception of the relation between language and reality is that the essential structure of reality, which grounds the logical structure of our language, cannot be expressed in propositions. Thus, it is argued that one of Wittgenstein's central aims in the *Tractatus* is to show that we are required, by the understanding of the nature of connection between language and reality that the work communicates, to recognize that the remarks by means of which it is communicated—which appear to talk about the intrinsic structure of reality—are nonsensical. The understanding of the essential structure of reality and of the relation between language and reality, which is conveyed in the work, is ultimately recognized to be ineffable: the words by which it has been communicated necessarily fail to express it.

Diamond and Conant have argued that this reading of the *Tractatus* does not work through to the real culmination of the book. The ontological myth with which the book begins has been only partially overcome, whereas, they argue, it is Wittgenstein's intention that the myth should be overcome completely. Thus, the opening remarks should be seen as Wittgenstein's self-conscious attempt to enter into the illusion of sense that leads philosophers to suppose that there is such a thing as an explanation of how language is tied to reality. The aim of the work is the complete overcoming of this illusion. What we are brought to recognize is that the apparently metaphysical remarks that the work contains are nonsense pure and simple, and that there is no understanding, expressible or inexpressible, that is conveyed by them. Ricketts makes the point as follows:

We think we have grasped the metaphysics Wittgenstein sketches in the 2.0's. When subsequently we reflect on Wittgenstein's words, on the view we take these words to convey, we realize that, on their own telling, they do not communicate a view at all. Wittgenstein's words pull themselves apart. (Ricketts, 1996, p.90)

Thus, the myth of the ontological foundation for the essence of language is not pushed underground, into the realm of things that we can grasp but which are incapable of expression in a proposition. Rather, the myth is shown up for the complete nonsense that it is. The idea that a genuine understanding might be conveyed by nonsensical remarks is itself ultimately to be seen as just another expression of the false imagination that arises out of our desire to believe that there is a point of view outside language from which philosophical explanation of its capacity to represent the world can be given. As a result of working through Wittgenstein's remarks we come to see that this too is an illusion. If the work is successful we are cured, not only of the desire to explain the relation between language and the world in propositions, but of the temptation to believe that there is *something* that cannot be said.

2. It is impossible to deny that the remarks with which the *Tractatus* begins appear to present a fundamental ontology that is held to be the foundation of our ability to picture the world in propositions. However, the interpretations I have just briefly sketched are agreed in holding that Wittgenstein ultimately intends to show that the remarks with which his work begins are, in some way or other, problematic. Thus, it is agreed that he intends his subsequent remarks to force us into a reassessment of the status of his opening pronouncements. However, the interpretations differ on how radical this reassessment is intended to be. On the traditional reading, we are supposed to realize that the remarks serve a purpose insofar as they convey Wittgenstein's understanding of the relation between language and a transcendent reality, but that in themselves they are nonsensical. On Diamond and Conant's reading, we are supposed to realize that the remarks that purport to say something about the relation between language and a transcendent reality, along with the majority of remarks which follow them, are nonsensical and convey nothing whatsoever. On both interpretations, therefore, it is held that the opening remarks of the *Tractatus* indulge our temptation to engage in a problematic form of philosophizing that it is Wittgenstein's intention we should, either partially or totally, overcome.

I want to take a different approach to Wittgenstein's opening remarks. I want to argue that the kind of reassessment that Wittgenstein's subsequent

remarks are intended to prompt in us is one on which we recognize that the opening remarks do not have the metaphysical status that they initially appear to have. That is to say, the impression that these remarks say something about the essential structure of a transcendent reality that our language somehow hooks onto is seen to be a false one. What we come to see is that what Wittgenstein is doing in these remarks is nothing more than tracing the logical order that is essential to language's ability to express propositions that can be compared with reality for truth or falsity. Once the central task of clarification has been accomplished, and the internal relation between propositions and the reality they depict has been made perspicuous, then the opening remarks undergo a change of aspect. We see that what appeared to be a series of metaphysical remarks that describe the a priori order of reality, which it possesses independently of our means of representing it, is, at bottom, an articulation of the logic, that is, the essence, of depiction. The idea that we are getting outside the symbolism and saying something about its relation to a transcendent realm with an intrinsic structure is indeed an illusion, but the illusion lies in our taking what belongs to the logic of the language in which we express propositions that can be tested for truth or falsity, for substantial doctrine. What we come to see is that what Wittgenstein is doing in these remarks is not metaphysics but logic. What we need to do now is see how this programmatic thought about how to read Wittgenstein's metaphysical-sounding remarks is to be worked out in detail.

3. The central idea is that we should provide a way of reading the opening remarks of the *Tractatus* that makes clear that they do not involve an attempt to make a substantial claim concerning the relation between language and a transcendent reality. When we view Wittgenstein's remarks in the light of the clarification of the internal relation between language and the reality it depicts, they take on the aspect of reflections on the logical order of representation as such. Let's start at the beginning:

The world is all that is the case. (*TLP* 1)

What is the case is a fact (*TLP* 2). The world is the totality of facts (*TLP* 1.1). A fact is the existence of a state of affairs (*TLP* 2). States of affairs can either exist or not exist. However, I have argued in the preceding chapters that a state of affairs that can either exist or not exist is internally related to a proposition that represents it: 'If an elementary proposition is true, the state of affairs exists: if an elementary proposition is false, the state of affairs does not

exist' (*TLP* 4.25). Thus, what is the case—a fact—is what can be represented by means of a true elementary proposition.¹ Facts, like states of affairs, are internally related to propositions with sense.

On this understanding of the relation between propositions and states of affairs, what *TLP* 1 amounts to is this: the world is what is represented by the totality of true propositions. The idea that in talking about 'the world' or 'all that is the case' Wittgenstein is gesturing towards something that is not essentially linked with language has disappeared: the world is what is described by the totality of true propositions. Wittgenstein goes on to make six further comments on his opening remark. The central idea of the current approach to these opening remarks is that we should read them in the light of the understanding of Wittgenstein's conception of the internal relation of depicting that holds between language and the world. Thus, each of the subsequent remarks is to be read as an expression of the logical order of any system of representation within which the world is represented.

At *TLP* 1.1, Wittgenstein writes:

The world is the totality of facts, not of things.

The world is the totality of facts. A fact is what is represented by a true elementary proposition. An elementary proposition is logically articulate; it is essentially a determinate combination of elements. As we saw in the previous chapter, the logical structure of a proposition is preserved in the state of affairs it represents. Thus, the logical constituents of an elementary proposition correspond to the logical constituents of the represented state of affairs. Thus, the fact that is represented by a true elementary proposition is logically articulate; a fact—what is the case—is logically complex. The logical constituents of a fact—things—are the meanings of the logically primitive signs that describe it completely. Once again, Wittgenstein uses the word 'thing' and 'object' to cover what corresponds to any logical constituent of a fully analysed proposition, that is, it is used in a way that covers the meaning of functional expressions, as well as the meanings of names of the form '*a*', '*b*', '*c*', and so on. As we saw earlier, the meaning of a primitive sign is internally

¹ This point is emphasized by Rhees as follows: '[I]f "*p*" is true—the truth is not a relation between the facts and what it says. I say the iron is getting warmer. If this is true, then what it says is a fact; not something which corresponds to it' (Rhees, 1960/1970, p.11).

related to the use of the sign in a system of representation that stands in a projective relation to the world; each thing that is the meaning of a primitive sign is the common characteristic of the members of a class of states of affairs. The question of existence or non-existence does not arise for the objects that are the meanings of the primitive signs by means of which facts are represented; objects are ‘what we can speak about *no matter what may be the case*’ (*PR*, p.72). What can exist or not exist is a state of affairs. The world—that which is the case—is the totality of existing states of affairs, not the totality of things.²

Wittgenstein goes on:

The world is determined by the facts, and by their being all the facts.

For the totality of facts determines what is the case, and also whatever is not the case. (*TLP* 1.11–1.12)

The world is determined, in the sense of fixed or characterized, by the totality of facts. The totality of facts is what is represented by the totality of true elementary propositions. A proposition has sense, that is, it has true–false poles. If a proposition is not true, then it is false. If the totality of true elementary propositions is given, then the totality of false elementary propositions is also given. The world—all that is the case—is characterized by the totality of true elementary propositions: the totality of true propositions fixes everything that

² David Stern writes, vis-à-vis *TLP* 1.1, that ‘Wittgenstein is not denying that there are things in the world; rather, he is insisting that we have to think of the world as composed of facts, the correlate in the world of the true propositions that we express in language’ (Stern, 1995, p.53). Stern clearly understands ‘not denying’ to mean ‘accepts’; it is just that we have to think of these things ‘in terms of their contribution to the facts they make up’; facts are ‘concatenations of simple objects’ (Stern, 1995, p.53); ‘each name refers to one of the simple objects out of which the world is composed’ (Stern, 1995, p.54). I want to argue that Wittgenstein ‘is not denying that there are things in the world’ insofar as he holds that the question whether an object exists or does not exist makes no sense. What exists or does not exist, a state of affairs, is logically articulate, but the logical constituents of a state of affairs are not proper parts of it that ‘must exist’, or which constitute ‘the unchanging ground that makes change possible’ (Stern, 1995, p.55). The existence of the logical constituents of states of affairs is internal to the system of representation that stands in a projective relation to the world and is independent of the existence or non-existence of particular states of affairs, i.e. of how the world is. To say that the object for which a name stands is a constituent of an existing state of affairs is just to say that the state of affairs is correctly described by means of a proposition in which the name occurs. Talk of objects as constituents of states of affairs is no doubt misleading, as Wittgenstein later acknowledges (see chap 5, fn.6). However, I want to argue that it should not be understood in a way that commits him to necessary existents common to all possible worlds.

is the case and also everything that is not the case. Once again, we see that any impression that Wittgenstein is moving beyond language to a transcendent realm that is constituted by what corresponds to an elementary proposition if it is true is an illusion. His remarks amount to nothing more than a reflection on the internal relation that holds between facts and true elementary propositions and between the concepts of truth and falsity.

It now becomes clear that Wittgenstein's next remark,

The facts in logical space are the world, (*TLP* 1.13)

is not a problematic attempt to ground logic in the a priori order of a transcendent reality. Rather, as we've seen, facts are internally related to true elementary propositions and thereby to logical space. An elementary proposition represents a state of affairs that either exists or does not exist only insofar as it is a logical picture. I argued in the previous chapter that Wittgenstein's logical investigation of the essence of logical pictures shows that an elementary proposition is a logical picture only insofar as it determines a place in a system of representation that exists in a projective relation to the world. An elementary proposition represents a possible state of affairs in logical space. A fact is the existence of a possible state of affairs. A fact is what is represented by a true elementary proposition in logical space. The logical space in which facts exist is not prior to or independent of the logical space in which propositions exist. There is one and only one logical space and it is shared by language and the reality it depicts.

4. At *TLP* 1.2, Wittgenstein writes:

The world divides into facts.

The world does not divide into things (objects), but into states of affairs that are describable by means of elementary propositions. At *TLP* 1.21, Wittgenstein makes the following problematic claim:

Each item can be the case or not the case while everything else remains the same.

Thus, each particular state of affairs that is described by means of an elementary proposition can either exist or not exist independently of the existence or non-existence of any other particular state of affairs:

States of affairs are independent of one another.

From the existence or non-existence of one state of affairs it is impossible to infer the existence or non-existence of another. (*TLP* 2.061–2.062)

What this amounts to is that the truth or falsity of any particular elementary proposition is logically independent of the truth or falsity of any other elementary proposition. Thus, for any set of elementary propositions, every combination of truth-possibilities of the members of the set is a possible combination. Wittgenstein quickly comes to realize that this idea is untenable. It assumes that each elementary proposition, not only can, but must, be tested singly for truth or falsity, and that the only system within which the representation of possible states of affairs takes place is that constituted by the system of propositional logic. In his 1929 paper, 'Some Remarks on Logical Form', Wittgenstein comes to recognize that this is false and that groups of propositions, for example, colour propositions, form their own systems of representation. He recognizes that it is only a whole system of propositions—rather than individual propositions—that is measured against reality for truth or falsity.

There is clearly a question why Wittgenstein ever held the untenable view that elementary propositions are logically independent. David Pears takes the view that the demand for the logical independence of elementary propositions arises out of the requirements that the constituents of elementary propositions stand for simple objects:

[O]rdinary factual sentences can be analysed down to factual sentences in which only simple objects are named. [Wittgenstein] calls these sentences 'elementary', and their distinctive feature is that they never contradict one another. This is because the objects named in them are devoid of internal structure. (Pears, 1987, p.66)

However, the connection between the idea that a name is a sign for a simple and the demand that elementary propositions are logically independent of one another is by no means clear. Indeed, if the idea that a name has meaning only in the context of a system of representation that stands in a projective relation to the world is correct, then the two ideas seem rather to be in tension with one another. If, as I argued in Chapter 5, the primitive signs that lie at the end of analysis are thought of as elements of representation, then it seems inevitable that the truth of one elementary proposition belonging to the system will automatically exclude the truth of others, in just the way that the presence of one colour at a particular spatio-temporal location excludes the presence of all others.³ The idea that elementary propositions might exclude

³ Michael Kremer also connects the requirement that elementary propositions are logically independent with the requirement that names stand for simples: '[A] name *is* a name of a *simple*, in

one another in this way does not threaten the real source of Wittgenstein's demand for simple signs, namely that there must be ultimate indefinables whose meaning is independent of the truth or falsity of any proposition. But if the demand for simple signs is not the source of Wittgenstein's claim that elementary propositions are logically independent, what is?

The most plausible answer to this question is that the demand for the independence of elementary propositions arises out of Wittgenstein's conviction that propositional logic is the essence of all representation as such. The framework intuition that Wittgenstein shares with Frege and Russell—that logic is the essential framework for all thought insofar as it aims at truth—is, for Wittgenstein, equivalent to the idea there is a pure, a priori system of logic that is independent of anything empirical. Logic concerns only what is essential to all propositions that represent states of affairs. Logical inference, or logical relations between propositions, must, on this view, be independent of the content of the propositions. For Wittgenstein, this means that logical relations between propositions arise exclusively out of the sharing of truth-arguments. I want to argue that it is his conception of the status of logic as the essence of all representation, and of inference as tautological, that is in operation in Wittgenstein's commitment to the logical independence of elementary propositions.⁴

It is Wittgenstein's commitment to the logical independence of elementary propositions that makes it impossible for him to provide any plausible

virtue of *which* logical relations hold between propositions involving *it* and propositions involving other names; "*a*" names a complex just in case propositions of the form " $\phi(a)$ " imply propositions of the form " $\psi(b)$ " for some *b*'s (constituents of *a*); "*a*" names a simple just in case propositions of the form " $\phi(a)$ " do not imply propositions of the form " $\psi(b)$ " for any *b*'s. Thus the mutual independence of elementary propositions is a consequence of Wittgenstein's conception of a simple name' (Kremer, 1997, p.98). However, the argument is clearly not strong enough to establish the demand for logical independence on the back of the demand for simples. Logical independence is the requirement that '[f]rom the existence or non-existence of one state of affairs it is impossible to infer the existence *or non-existence* of another' (*TLP* 2.062, my italics). Kremer does not give an argument to show that it is a mark of a name's being simple that the truth of an elementary proposition ' $\phi(a)$ ' does not imply the falsity of an elementary proposition ' $\psi(a)$ '.

⁴ In December 1929, Wittgenstein remarks: 'when I was writing my work . . . I thought that all inference was based on tautological form. At that time I had not seen that an inference can also have the form: This man is 2m tall, therefore he is not 3m tall. This is connected with the fact that I believed that elementary propositions must be independent of one another, that you could not infer the non-existence of one state of affairs from the existence of another' (*WVC*, p.64). This may be seen as giving some support to the idea that his fundamental commitment is to the tautological nature of inference, and that this is what leads him to hold that elementary propositions are logically independent of one another.

example of an elementary proposition that meets all of his logical requirements. However, even if the demand for the logical independence of elementary propositions is untenable, it remains the case that what *TLP* 1.21 amounts to is a reflection on the logical space within which a propositional sign comes to represent a possible state of affairs. Thus, each proposition determines a place in logical space. A place in logical space is a place in which something can either exist or not exist. We say that something exists in that space if the proposition is true and that it fails to exist if the proposition is false. Given the assumption of the logical independence of elementary propositions, it is impossible to infer the truth or falsity of one elementary proposition from the truth or falsity of another. That is to say, whether something exists at one place in logical space (whether one state of affairs exists or does not exist) is independent of whether or not something exists at another place in logical space (of whether any other state of affairs exists or does not exist).

5. On a first reading, the opening remarks of the *Tractatus* appear to make a series of claims concerning the essential structure of a transcendent reality. It is, I'm suggesting, only once we have worked through the remarks in which Wittgenstein clarifies the internal relation of depiction that holds between language and the world that we can see these remarks in a proper light. What we took to be metaphysics is now seen to be nothing more than a matter of recognizing that the logical order that is essential to our system for representing the world in propositions is essentially preserved in the logical order of the reality that is depicted. This should not be taken to suggest that Wittgenstein believes that we can derive metaphysics from logic. Rather, he wants us to recognize that what we were engaged in all along was a logical investigation of the order that is essential to any system of representation in which reality is represented. We are not directed to draw any metaphysical conclusions from this order: the order belongs to the system of representation in which the world is represented and it is this order itself that is the beginning and the end of our investigation. The same work of reassessment must now be undertaken in relation to the remarks about objects and states of affairs that occupy Wittgenstein in *TLP* 2–2.063. These are undoubtedly some of the most difficult and treacherous remarks of the entire work. The aim is that we should come to see that their overtly metaphysical content is an illusion: Wittgenstein is doing nothing more in these remarks than tracing the order of logical space

that is made clear by means of the logical investigation of how a proposition expresses its sense.

At *TLP* 2–2.01, Wittgenstein writes:

What is the case—a fact—is the existence of states of affairs.

A state of affairs (a state of things) is a combination of objects (things).

A state of affairs can either exist or not exist. As we saw in the previous chapter, a state of affairs can either exist or not exist only insofar as it is logically articulate. The logical articulation of a state of affairs is mirrored in the logical articulation of the proposition by means of which it is represented. The logical articulation of a proposition consists in its being a combination of primitive signs, each of which makes a common contribution to the sense of the propositions in which it occurs. The meaning of a primitive sign is simple; it cannot be further analysed. Wittgenstein uses the notion of a thing or an object to cover the meanings of all the logically simple parts of a proposition that represents a state of affairs. The idea is that we should see the objects that Wittgenstein introduces in *TLP* 2.01, not as concrete objects, but as the meanings of primitive signs, that is, as elements of representation. The correlation between the primitive names and objects is not a matter of hypothesis; the correlation exists insofar as the primitive signs have a meaning, that is to say, insofar as these signs play a determinate role in a system of representation that stands in a projective relation to the world. On a first reading, Wittgenstein's remarks purport to make a claim about the fundamental ontology of a transcendent reality. However, it is now clear that the remark is a reflection on the order that belongs to any system within which possible states of affairs are represented. Objects are not necessary existents that endure through all change, but the meanings of primitive signs in a system for representing the world in propositions.⁵

This interpretation of *TLP* 2.01 goes along with a reassessment of the claim that 'it is essential to things that they should be possible constituents of states of affairs' (*TLP* 2.011). On a first reading, it may appear that Wittgenstein is asserting the existence of a kind of transcendent object that has its possibilities

⁵ cf. Norman Malcolm: 'Objects are unchanging, enduring things They persist through all change Their configurations constitute states of affairs in the world The objects remain the same in every possible world, including a world in which there is no language' (Malcolm, 1986, p.26). In chapter 3 of *Nothing is Hidden*, Malcolm defends this view against the anti-metaphysical interpretation of Winch, Ishiguro, and McGuinness, a version of which is defended here. For a recent version of the claim that objects are necessary existents that endure though all change, see Proops, 2004.

for combining with other objects written into it. On the current interpretation, this seemingly metaphysical claim is no more than an acknowledgement that a primitive sign has a meaning only insofar as it is used in propositions that describe possible states of affairs, that is, in propositions that can be compared with reality for truth or falsity. The force of the remarks that follow now becomes clear:

In logic nothing is accidental: if a thing *can* occur in a state of affairs, the possibility of the state of affairs must be written into the thing itself. (*TLP* 2.012)

A thing is the meaning of a primitive sign. A primitive sign has meaning insofar as it makes a common contribution to determining the place of the members of a class of propositions in logical space. The meaning of the sign is fixed by its role in a system of representation that exists in a projective relation to the world: their ‘meaning . . . belong[s] to them in a way that is once and for all complete’ (*PT* 3.20102). Thus, a primitive sign has a meaning—stands for an object—just insofar as it makes a determinate contribution to determining the place of propositions in logical space.

Wittgenstein goes on:

If things can occur in states of affairs, this possibility must be in them from the beginning.

Once we’ve made the connection between things and the meanings of primitive signs, the remark loses its illusory metaphysical air. Primitive signs do not get their meaning directly, by means of a direct relation between a sign and a transcendent object.⁶ They have a meaning only in the context of a proposition, that is, only insofar as they constitute an element in a system for

⁶ One of the striking differences between the discussion of simples in the *Notebooks* (March 1915–July 1915) and the remarks of the *Prototractatus* and the *Tractatus* is that in the former, but not in the latter, Wittgenstein speaks of a ‘simple correlation’ (6.5.15), and of simple signs as signs which have an ‘immediate reference’ (9.5.15). As long as he is thinking in terms of the idea of a direct link between a simple sign and an object, he is exercised by the question why such a link should not exist between a name and a complex (see, e.g. *NB*, p.49 (19.5.15), pp.49–50 (23.5.15), and p.60 (15.6.15)). This worry has disappeared completely from the *Prototractatus* and the *Tractatus*. The strand from the *Notebooks* that is preserved and built on is the one that links the demand for simples with the demand for definiteness of sense, and which sees the idea of the simple as ‘already contained in that of the complex and in the idea of analysis’ (*NB*, p.60, 15.6.15). In this strand ‘the existence of simple objects [is] related to that of the complex ones as the sense of $-p$ is to the sense of p : the simple object is *prejudged* in the complex’ (ibid). This is the strand that understands the question about simples as a question about the essential nature of a symbolism in which states of affairs are represented. It follows, I want to argue, that the argument for simples cannot involve any hypothetical claim about the ultimate constituents of an independently constituted reality.

representing the world in propositions. There is, in other words, an internal relation between the objects that are the meanings of primitive signs and the representation of states of affairs.

Wittgenstein continues:

Just as we are quite unable to imagine spatial objects outside space or temporal objects outside time, so too there is *no* object that we can imagine excluded from the possibility of combining with others.

A spatial object is the meaning of a primitive name, for example, of a spatial coordinate, and a constituent of the states of affairs represented by means of propositions in which the name occurs; similarly for temporal objects. A name stands for a simple spatial object only within a system of representation in which spatial complexes are represented. The possibility of a given spatial complex is equivalent to the existence, within this system of representation, of a proposition which represents it. Thus, to imagine, or think of, a spatial object is already to imagine, or make thinkable, the whole of space. Similarly, there is no object—i.e. no meaning of a primitive sign—that we can imagine without imagining a system of representation within which this object combines with others in possible states of affairs that are represented by means of propositions belonging to the system. Objects, the meanings of primitive expressions, are essentially the logical constituents of complexes that can either exist or fail to exist. What this amounts to is that, just as the sense of a proposition is essentially its place in logical space, so the meaning of a primitive sign is essentially determined by its common contribution to the members of a class of propositions, within a system of representation that stands in a projective relation to the world.

The final paragraph of *TLP* 2.0121 is as follows:

If I can imagine objects combined in states of affairs, I cannot imagine them excluded from the *possibility* of such combination.

If, as I have suggested, we read Wittgenstein's opening remarks as a reflection on the logical order of our language for representing the world in propositions, then the point is simply that a primitive sign gets its meaning from its role in determining the sense of elementary propositions: we cannot think of the meaning of a primitive sign outside its role in elementary propositions with sense. The meaning of the sign does not depend upon the truth of any particular elementary proposition: "Things are independent in so far

as they can occur in all *possible* situations.’ However, insofar as the meaning of a primitive sign is essentially its role in determining the sense of a class of propositions that represent possible states of affairs ‘this form of independence is a form of connexion with states of affairs, a form of dependence’ (*TLP* 2.0122). To understand a name is to know what is the case if an elementary proposition in which it occurs is true; it is this that connects language to reality and thereby gives a simple name its content.

Once again, therefore, remarks that appear to be metaphysical are, on this interpretation, seen to do nothing more than read off the logical order of any system of representation that can be used to describe possible states of affairs. Insofar as we are concerned with everything that is essential to a system of representation within which propositions can be compared with reality for truth or falsity, we are concerned with what is essential to the representation of reality as such. Insofar as the logical order that is essential to representation is reflected in the logical order of what is projected—i.e. the world—we can, Wittgenstein believes, think of this order as what a system of representation essentially has in common with the reality it represents. This is not, as I’ve stressed, a matter of deducing features of a transcendent reality from features of language. It is merely a way of tracing what is essential to any system within which we can derive, from a picture or a propositional sign, a representation of a possible state of affairs. Wittgenstein does not direct us to infer anything about a transcendent reality from the order that is common to language and the reality it depicts; the order we’re concerned with is prior to truth and is presupposed in any comparison between language (i.e. a proposition) and the world. The question whether the order is correct or incorrect simply makes no sense. Once we recognize that the opening remarks of the *Tractatus* provide no more than a description of the logical order that is revealed by the investigation of the logic of depiction, they lose their metaphysical mystique. We realize that these remarks, contrary to first appearances, do not even get so far as being an attempt to take up a perspective outside language.

6. The logical status of Wittgenstein’s opening remarks is made explicit in the parenthetical remark that ends *TLP* 2.0122: ‘(It is impossible for words to appear in two different roles: by themselves, and in propositions)’. The reflections on objects and their connection with states of affairs do not express an insight into what necessarily exists, or into the intrinsic, essential structure of a transcendent reality; they do not ground the logic of our language

in an objective system of necessities and possibilities. Rather, they are part of an exploration of the essential logical structure of a system of representation within which we can express propositions with sense, that is, propositions that represent possible states of affairs. The point is made still more explicitly in the wording of the *Prototractatus*, where the parenthetical observation of *TLP* 2.0122 is given the following, fuller expression:

What this comes to is that if it were the case that names had meaning both when combined *in* propositions and outside them, it would so to speak, be impossible to guarantee that in both cases they really had the same meaning, in the same sense of the word.

It seems to be impossible for words to appear in two different roles: by themselves, and in propositions. (*PT*, 2.0122)

PT 2.0122 is a comment on *PT* 2.012, which occurs in the *Tractatus* as *TLP* 2.012: 'In logic nothing is accidental: if a thing can occur in a state of affairs, the possibility of the state of affairs must be written into the thing itself.' What this comes to is this: the object for which a sign stands is the meaning of the sign; the meaning of a sign consists in its common contribution to the sense of members of the class of propositions in which it is a constituent. As we saw in the previous chapter, the meaning of the sign is internal to the system of representation as it stands in a projective relation to the world and does not depend upon a direct link between an indefinable sign and something outside language. If a direct link between a sign and something outside language could be made, then it would be impossible to guarantee that the sign whose meaning is determined in this way and a sign whose meaning is determined by its role in propositions have the same meaning. The direct link would, as far as our system of representation is concerned, be an idle cog: it does not connect with the rest of the mechanism. What Wittgenstein eventually comes to see, however, is that the whole idea of meaning as an object that is correlated with a word is completely empty: the meaning of a word is its use within a system of representation that is applied in the expression of judgements that are true or false, or, as he comes to think of it, its use in a language-game. His early mistake lay in his uncritical acceptance of a primitive idea of meaning, on which meaning is conceived as something that 'corresponds' to a word, which we grasp, as it were all at once, when we come to understand the word. It is, as we saw earlier, to conflate the meaning of a name with the bearer of the name, something that corresponds to a name. It is this illicit idea of meaning as something that 'corresponds' to a word that Wittgenstein exposes as empty in his later discussion

of rule-following. However, as we'll see in subsequent chapters, the *Tractatus* also contains insights concerning the fundamental significance of the concept of the use of an expression that is the basis of his later thought, and which enable him to overcome the illusions associated with the primitive idea of meaning.⁷

The remarks that follow *TLP* 2.0122 now become transparent:

If I know an object I also know all its possible occurrences in states of affairs.

(Every one of these possibilities must be part of the nature of the object.)

A new possibility cannot be discovered later. (*TLP* 2.0123)

To grasp the meaning of a sign is to grasp its role in a system for representing possible states of affairs in elementary propositions. To understand a sign is essentially to know all its possible occurrences in elementary propositions, and hence to know all the possible occurrences of the object that is the meaning in possible states of affairs. Wittgenstein continues:

If I am to know an object, though I need not know its external properties, I must know all its internal properties. (*TLP* 2.01231)

I must know all the possible states of affairs in which an object can occur, but I do not have to know which of these states of affairs exist and which do not. In other words, I must know the sense of each proposition in which the sign for the object occurs, but I do not have to know which are true and which are false.⁸ Finally:

If all objects are given, then at the same time all *possible* states of affairs are given. (*TLP* 2.0124)

If the meanings of all primitive signs are given, then all elementary propositions are given. 'Objects contain the possibility of all situations' (*TLP* 2.014).

⁷ I will argue, in Chapter 12, that the insights concerning the autonomy of language that underlie Wittgenstein's argument for simples remain fundamental to the later philosophy. In the critical discussion of simples, in the *Investigations*, Wittgenstein does not reject his earlier ideas outright, but attempts to clarify what is correct and what is incorrect in them.

⁸ On this interpretation, to know an object is essentially equivalent to possessing a practical ability to employ the name of the object (i.e. the sign of which the object is the meaning) in propositions with sense. This ability is manifest in the application of language, i.e. in my asserting that a proposition is true when it is true. This makes Wittgenstein's sharp separation between knowing an object (grasping the meaning of a word) and knowing the existence of states of affairs of which it is a constituent (knowing the truth of propositions in which the word occurs) look problematic. It commits him to a clear distinction between grasping the meaning of an expression and using it in judgements, which he will later put into question. His commitment to the distinction in the *Tractatus* can be seen as an expression of the mythological conception of meaning as something that is correlated with a word.

What that comes to is this: we understand a new elementary proposition on the basis of our grasp of the meaning of the primitive signs that occur in it.

7. Wittgenstein's fundamental idea is that an elementary proposition stands in an internal relation to the situation that it represents. The internal relation consists in a rule of projection that determines the conditions under which the elementary proposition is true or false. It is in virtue of this rule of projection that the propositional sign represents a possible state of affairs. It is, as we've seen, essential to the internal relation that holds between a proposition and the situation that it represents that everything essential to the proposition's representing what it does lies in the logical order of the system of representation to which it belongs, and does not depend upon anything's being the case. Thus, it is made clear that our ability to represent possible states of affairs in propositions depends upon the existence of primitive signs whose meaning is determined by their place in a system of representation that stands in a projective relation to the world. That is to say, it depends upon the existence of primitive signs that stand in an internal relation to the objects that are their meanings. And this, Wittgenstein argues, in turn requires that the objects that are the meanings of these primitive signs cannot be logically composite, for to be logically composite is precisely to be describable by means of an elementary proposition. An object is simple just insofar as it is essentially the meaning of a primitive sign. Wittgenstein states that objects are simple in *TLP* 2.02. What now becomes clear is the connection between this remark and Wittgenstein's logical investigation of how a proposition expresses its sense; the remark is not an attempt to go beyond what he believes to be internal to the workings of a language in which we can describe how things stand.

We have already considered the argument for simple objects that Wittgenstein gives in *TLP* 2.0201–2.0212 in the previous chapter. At *TLP* 2.022, Wittgenstein writes:

It is obvious that an imagined world, however different it may be from the real one, must have *something* in common with it.

We imagine a world by describing it in language. We use the expressions of our language to describe states of affairs as we imagine them. We can, for example, imagine a world that is black and white, or in which shades of red are the only colours. However, the meaning of the words 'black', 'white', 'red' — the objects

for which these expressions stand—must be common between the imagined world and the real one. Thus, Wittgenstein goes on:

Objects are just what constitute this unalterable form. (*TLP* 2.023)

The meanings of primitive signs are the basis of all description. The simple objects for which the primitive signs stand constitute what Wittgenstein calls ‘the substance of the world’. What is now clear is that this substance is not a metaphysical stuff, that which endures through all changes, but is constituted by the meanings of the basic expressions that we use to characterize the world as we imagine it. The substance of the world is equivalent to logical space, that is, the space within which all possible states of affairs are represented. What at first sight appears to be a statement of metaphysics is seen to be nothing but the shadow of the logic of the language in which we represent the world.

Wittgenstein’s comment on *TLP* 2.023 now becomes transparent:

The substance of the world *can* only determine a form and not any material properties. For it is only by means of propositions that material properties are represented—only by the configuration of objects that they are produced. (*TLP* 2.0231)

The meanings of primitive signs are the basis of all description of possible states of affairs. A possible state of affairs is represented by means of a determinate combination of primitive signs. Logical space is given with the system of primitive signs in terms of which all propositions with sense are expressed. Thus, the space of possibilities is given with the primitive signs in a system of representation that stands in a projective relation to the world. This space of possibilities exists independently of what is the case. If we treat spatial coordinates or colour terms as primitive names, then the objects that are the meanings of the names exist simply insofar as the name exists, and is independent of the existence of any particular state of affairs. A material property—say the property of redness—exists, by contrast, only if a particular state of affairs, one described by means of a proposition in which ‘red’ is a constituent, exists; the existence of a material property just is the existence of a particular state of affairs. If that is the case, then it is clear that we should not think of the material property as the meaning of a simple sign, but as something that exists insofar as a state of affairs that is described by means of a combination of simple names exists. For example, if we take it that the colour red is the meaning of the primitive name ‘red’, and that red is a

constituent of a possible state of affairs insofar as the word ‘red’ occurs in the proposition that represents it, then the material property, redness, exists insofar as a state of affairs that is described using the word ‘red’ exists. Thus, the manner of speaking in which ‘objects are colourless’ (*TLP* 2.0231) is the manner of speaking in which numbers are colourless. Objects are the meanings of primitive signs, and their existence is internal to the system of representation by means of which the material world is described correctly or incorrectly.

8. *TLP* 2.0233 and *TLP* 2.02331 make a pair of linked remarks. *TLP* 2.0233 reads as follows:

If two objects have the same logical form, the only distinction between them, apart from their external properties, is that they are different.

Two objects have the same logical form if they are the meanings of symbols that are substitutable for one another in propositions with sense. These objects (meanings) share all their essential—i.e. logical—properties. Let us suppose once again that colours are examples of simple objects that share a logical form. The symbols ‘red’ and ‘blue’ share all their logical properties insofar as they can be everywhere substituted for one another in propositions with sense. How are these objects distinguished? Wittgenstein suggests that they are distinguished by ‘their external properties’. I will take Wittgenstein’s talk of external properties, in connection with simple objects that are the meanings of primitive signs, to mean the existing states of affairs in which such objects are logical constituents. I take it that what it means for an object to be a logical constituent of an existing state of affairs is simply this: the proposition that describes the state of affairs, and in which the name occurs, is true. On this reading, red and blue are distinguished by the existing states of affairs in which they are constituents, that is to say, by the distinct classes of true propositions in which the primitive signs ‘red’ and ‘blue’ are propositional elements. Apart from this, Wittgenstein suggests, ‘the only distinction between them . . . is that they are different.’ I take this to be an essential aspect of their being simple objects: we cannot distinguish them by means of definitions. However, we cannot grasp the meaning of the symbols ‘red’ and ‘blue’ without knowing that red and blue are distinct objects, that is, that ‘red’ and ‘blue’ mean different things. This is just another way of making the point that we cannot understand two primitive signs without knowing whether they have the same or different meanings (cf. *TLP* 4.243).

At *TLP* 2.02331, Wittgenstein writes:

Either a thing has properties that nothing else has, in which case we can immediately use a description to distinguish it from the others and refer to it [indicate it]; or, on the other hand, there are several things that have the whole set of their properties in common, in which case it is quite impossible to indicate one of them.

For if there is nothing to distinguish a thing, I cannot distinguish it, since otherwise it would be distinguished after all.

This comment on *TLP* 2.0233 takes up the question of the distinction between the external properties of two objects that have the same logical form. The remarks suggest that two objects that shared all their external properties could not be distinguished from one another and would not, therefore, be distinct. Thus, if the result of substituting the two signs for one another always produces propositions that are the same in truth-value, then there is nothing to distinguish the objects that are the meanings of the signs. There are no distinctions between the objects that are the meanings of primitive expressions, 'a', 'b', 'xRy', 'xR'y', that cannot be made clear by means of a description of a state of affairs in which only one of the objects is a constituent, that is, by means of the description: *Fa* and not-*Fb*, '*aRb*' and '*-aR'b*'. What this amounts to is that if a sign, *s*, can everywhere be substituted for another sign, *s'*, without altering the truth or falsity of the proposition in which it occurs, then *s* and *s'* are the same symbol, they are used with one and the same meaning.

9. I suggested earlier that if we identify simple objects with the meanings of signs whose meaning is determined by their place in a system of representation that stands in a projective relation to the world, then we are no longer led to interpret Wittgenstein's 'substance' as a kind of metaphysical stuff. How, then, are we to understand the claim: 'Objects make up the substance of the world' (*TLP* 2.021). I've argued that objects are not to be understood as necessary existents, but as the meanings of the primitive expressions by means of which we describe states of affairs that can either exist or fail to exist. If objects make up the substance of the world, then substance is, on this reading, equivalent to the meanings of primitive symbols within a system of representation which is used to describe possible states of affairs. The existence of the object for which the signs of the system stand is, as we've seen, independent of the truth or falsity of any particular proposition in which the signs occur. Once again, substance is not, on this interpretation, a kind of stuff at all; substance is what exists insofar as there is a language in which we describe possible

states of affairs. Substance is equivalent to logical space, that is, to the space within which all possible situations are represented.

Thus, when Wittgenstein writes:

Substance is what subsists independently of what is the case, (*TLP* 2.024)

he is not to be understood as making a metaphysical claim that there is something that persists through all changes. Rather, he is reflecting on the autonomy of logical space: the system of representation within which we describe what is the case is independent of the existence or non-existence of any particular state of affairs. In the same way, substance 'is form and content' insofar as the primitive symbols that constitute the indefinables of our system for representing the world in language are 'the mark of a form and a content' (*TLP* 3.31). The form of a primitive symbol is what is shared with every expression that can be substituted for it; its content is the meaning that arbitrary conventions have assigned to that particular sign.

At *TLP* 2.0251, Wittgenstein observes:

Space, time, and colour (being coloured) are forms of objects.

Our simple names are elements of representation; these elements of representation include spatial and temporal coordinates and names of colours. The elements of representation are the constituents of propositions that describe empirical states of affairs. These elements of representation are correlated with objects. The logical space that constitutes the possibilities for representing these empirical states of affairs is fixed by the possibilities for combining these elements of representation in propositions with sense. The possibilities for an element's occurring in propositions with sense constitutes the form of the object that is its meaning. Wittgenstein's remark suggests that we should recognize that there are (at least) three distinct forms of object, that is, three distinct kinds of name or elements of representation.

At *TLP* 2.026, Wittgenstein writes:

There must be objects, if the world is to have an unalterable form.

The form of the world is what is common to any world that we can imagine. We imagine a world by describing it in propositions. The meanings of the primitive expressions of our language are essential to the description of any world, real or imaginary. The meanings of primitive expressions are thus what constitute the unalterable form common to all worlds. There must be

primitive symbols whose meaning is independent of the existence of particular states of affairs, if the world is to have an unalterable form:

Objects, the unalterable, and the subsistent are one and the same. (*TLP* 2.027)

Objects are the meanings of the primitive symbols that we use to picture any possible state of affairs, real or imaginary. Thus:

Objects are what is unalterable and subsistent; their configuration is what is changing and unstable. (*TLP* 2.0271)

We represent a possible state of affairs by combining primitive expressions—i.e. signs that stand in an internal relation to the object that is their meaning—in an elementary proposition. The way primitive expressions are combined in an elementary proposition represents a possible state of affairs. What this amounts to is that the propositions in which the primitive expressions are determinately combined can be measured against reality for truth or falsity. If the proposition is true, then the state of affairs exists; if it is false then the state of affairs does not exist. Thus, a particular elementary proposition with sense is either true or false; its truth-value does not change over time. However, the dynamic aspect of the world is shown by the fact that we have constantly to construct new propositions to describe how things are. What is changing and unstable is not the truth-values of individual elementary propositions, but the combinations of primitive expressions in elementary propositions that describe how things are. Again, all sense that Wittgenstein is making a metaphysical claim about the necessary existence of something that endures through change disappears. Thus, when he says that ‘the configuration of objects produces states of affairs’, we should understand this as saying nothing more than that the description of a state of affairs is logically complex, that is to say, it has logical parts that correspond to the common characteristic of the members of a class of states of affairs. As we saw earlier, Wittgenstein is later critical of this assimilation of states of affairs to complexes. However, although he makes the mistake of speaking of the object for which ‘red’ stands as a constituent of a state of affairs, he does not, I want to argue, intend us to think of the constituents of states of affairs as necessary existents that are common to all possible worlds.

Wittgenstein goes on:

In a state of affairs objects fit into one another like the links of a chain. (*TLP* 2.03)

To say that an object is a constituent of a state of affairs is just to say that the sign that stands for the object occurs in the proposition that represents it. Thus, it belongs to the essence of the objects that are the constituents of states of affairs that they exist in combination with other objects in possible states of affairs. Nothing is required to link the objects that are the constituents of possible states of affairs; these objects do not exist outside possible states of affairs. Thus, we might think of objects as essentially the logical articulations within a possible state of affairs: they are combined 'like links in a chain' with other objects in possible states of affairs.

Wittgenstein continues:

The determinate way in which objects are connected in a state of affairs is the structure of the state of affairs. (*TLP* 2.032)

It is, as we've seen, only in virtue of the fact that a proposition puts names in a determinate combination with one another that it constitutes a logical picture of a possible state of affairs. A logical picture determines a unique place in logical space. A proposition determines a unique place in logical space insofar as it puts names in a determinate combination and thereby represents a determinate combination of the objects for which the names stand. Insofar as a proposition and the state of affairs it represents stand in an internal relation to one another, the essential structure of the representing fact is preserved in the structure of what is projected, that is, in the structure of the state of affairs that it represents. Thus, the logical constituents of a state of affairs correspond to the logical constituents of the proposition that represents it.

10. One of the main themes of Wittgenstein's logical investigation of the essence of a proposition is that propositions, owing to sense, cannot be *relata*. As we saw in Chapter 2, one of his objections to Frege and Russell's treatment of the logical constants is that they hold them to be genuine functions or relations that make a substantive contribution to the propositions in which they occur. As Wittgenstein sees it, this is to treat propositions as *relata* and thus to assimilate propositions to names. As we saw, Wittgenstein takes it to be an essential part of his aim of making the nature of a proposition perspicuous that we come to see that a molecular proposition is a function of the sense of the propositions that are its atoms, without itself adding anything new to the sense that it expresses. We will look in detail at Wittgenstein's investigation of molecular propositions in Chapter 8. However, the remarks that close the opening section of the *Tractatus* must be interpreted as an anticipation of what this investigation makes clear: the content of a molecular proposition is

nothing over and above the content of its atoms; a molecular proposition is a structure of the elementary propositions that are its bases.

At *TLP* 2.034, Wittgenstein writes:

The structure of a fact consists of the structure of states of affairs.

The structure of a state of affairs is the determinate way in which objects that are the logical constituents of the state of affairs are combined with one another. The logical structure of a state of affairs is mirrored—or shown—in the logical structure of the elementary proposition that represents it. Thus, the logical structure of the state of affairs that is described by the proposition ‘*aRb*’ is shown in the way that ‘*a*’, ‘*b*’, and ‘*xRy*’ are combined in the proposition. So far, we have been thinking of facts as the existence of a state of affairs, that is, as what is represented by true elementary propositions. At *TLP* 2.034, Wittgenstein is widening his notion of a fact to include complex logical constructions of existing and non-existing states of affairs. The structure of a fact is given by a rule that expresses a structural relation between the fact and the existence and non-existence of states of affairs.

Wittgenstein goes on:

The totality of existing states of affairs is the world.

The totality of existing states of affairs also determines which states of affairs do not exist.

The existence and non-existence of states of affairs is reality.

(We also call the existence of states of affairs a positive fact, and their non-existence a negative fact.) (*TLP* 2.04–2.06)

The world is determined completely by the totality of true elementary propositions: everything that is the case can be described by means of true elementary propositions. The totality of true elementary propositions also determines which elementary propositions are false: an elementary proposition that is not true is false. Thus, the totality of existing states of affairs also determines which states of affairs do not exist. One can speak of positive and negative facts, insofar as a positive fact is what we call the existence of a state of affairs, and a negative fact is what we call the non-existence of a state of affairs. A positive fact is what is represented by a true elementary proposition; a negative fact is what is represented by a true negation of an elementary proposition. A negative fact cannot be represented by means of an elementary proposition, but is essentially represented as a structure of an elementary proposition, *p*, which, if it is true, expresses a positive fact. Thus, we can think of facts more

generally as structures of states of affairs. The structure of a state of affairs is expressed by means of a rule that expresses a structural relation between the fact and states of affairs that either exist or do not exist. If the world is what is described by the totality of true elementary propositions, then reality is what is described by the totality of propositions, including all those that are truth-functions of elementary propositions.

11. This completes my reassessment of the apparently metaphysical remarks that precede Wittgenstein's logical investigation of how a proposition expresses its sense. The result of that investigation is a clarification of the internal relation of depicting that holds between language and the world. The aim of the current chapter has been to show that when we read the opening remarks in the light of Wittgenstein's clarification of the nature of this internal relation, they can be seen to lose their metaphysical aspect. We come to see that they are nothing more than a reflection on the logical order that is essential to any system of representation that stands in a projective relation to the world, that is, within which we can construct propositions that are either true or false. At first sight, the remarks appear to point to something outside language and independent of it; what we come to see is that this is an illusion. Wittgenstein is simply exploiting the internal relation between language and the reality that it depicts and tracing the essential logical order of that language as it is reflected in the logical order of what is projected, namely a picture of the world. Insofar as the interpretation succeeds, it allows us to acquit Wittgenstein of engaging in the kind of metaphysics that the traditional reading commits him to, and to which the *Tractatus* expresses open hostility. There is, it must be acknowledged, an element of dogmatism in Wittgenstein's conception of the nature of propositions, but there is no attempt to derive from this conception anything beyond the logical order that Wittgenstein believes to be essential to the representation of states of affairs. I hope that this goes at least some way to showing how it is possible for Wittgenstein to view the *Tractatus* as a work whose aims are purely clarificatory. However, even if this is the case, it still leaves another question unanswered: why does Wittgenstein choose to write the book in the way he does? Why does he begin the work with remarks that invite a reading that is not only mistaken, but which is likely to make the task of understanding the logical investigation that follows even more difficult than it would otherwise be?

I don't know whether there is any fully convincing answer to this question. However, it does seem to me that the interpretation I have given allows us to preserve something of Diamond and Conant's understanding of the

motivation for the book's having the structure that it does. Thus, Wittgenstein's remarks can be seen to enact a lesson in the real nature of philosophical investigation. For Diamond and Conant, this lesson is that the very possibility of such an investigation is an illusion: we realize that the words that purport to express a philosophical understanding of the relation between language and reality communicate nothing at all. On the reading I have given, the lesson is less stark but no less revolutionary: we realize that what appears to be substantial philosophical doctrine is in reality nothing more than an investigation of the workings of our language. The difference between Wittgenstein's remarks and the metaphysical pronouncements of the traditional philosopher is that the former are a self-conscious casting of reflections on the logic of our language in metaphysical guise. Taken at face value, the remarks are indeed plain nonsense: the possibility of a philosophical perspective outside language is indeed an illusion. However, the process of reassessment that I've suggested Wittgenstein intends us to undertake teaches us that what we think we perceive from this illusory perspective is nothing but the logic of our language; we think we are tracing the outline of a transcendent reality, whereas all we are doing is tracing the workings of the language by means of which reality is represented. Remarks that purport to be about the essential structure of the world are seen, on reflection, to be nothing more than a description of what is essential to a system for representing possible states of affairs in propositions. What Wittgenstein teaches us is that our ability to represent the world in propositions has nothing to do with metaphysics and everything to do with the logical order of a system of representation, or with everything that is essential to the rules whereby language is projected onto reality.

Some support for the claim that Wittgenstein intends the reader to undertake the sort of reassessment of the opening remarks that I have described can be derived from Wittgenstein's own intellectual history. In a discussion of Wittgenstein's remarks on solipsism, Peter Sullivan argues against a Pears-style reading of the *Tractatus*, on which Wittgenstein is held to commit himself to the view that the world's limits are fixed by objects whose intrinsic possibilities for combination are independent of all thought or representation. On this object-based view, language's ability to represent the world depends upon a metaphysical story of the relation between language and the world, which succeeds in locking the two together in such a way that the limits of language are guaranteed to reflect the predetermined limits of the world. Sullivan argues that there is no sign of Wittgenstein's thinking this way in either

the *Notebooks* or the *Tractatus*. However, he claims that there are remarks in the *Notebooks* in which Wittgenstein suggests that he did once think of the task of philosophy in these terms, but that he came to realize it was mistaken. Thus, on 3.9.14, Wittgenstein raises the following question: ‘We have signs that behave like signs of the subject–predicate form, but does that mean that there really must be facts of this form? That is, when those signs are completely analysed? And here the question arises again: Does such a complete analysis exist? *And if not*: then what is the task of philosophy?!?’ (*NB*, p.2). Wittgenstein then goes on to signal a fundamental change in his conception of philosophy’s task:

Then can we ask ourselves: Does the subject–predicate form exist? Does the relational form exist? Do any forms exist at all that Russell and I were always talking about? (Russell would say: “Yes! That’s self-evident.” *Ha!*)

Then: if *everything* that needs to be shewn is shewn by the existence of subject–predicate SENTENCES etc., the task of philosophy is different from what I originally supposed. But if that is not how it is, then what is lacking would have to be shewn by means of some kind of experience, and that I regard as out of the question. (*NB*, p.3)

Sullivan suggests that the conception of philosophy that Wittgenstein is rejecting here ‘is that of establishing a coordination of language and world: that could rest at bottom only on “some kind of experience”, and so would be inconsistent with the insight that “Logic must look after itself” (*NB*, p.2)’ (Sullivan, 1996, p.207). He goes on to argue that Wittgenstein’s alternative conception of the task of philosophy focuses on the idea of an internal relation between a proposition and the state of affairs it represents. Thus, Wittgenstein comes to see it ‘as essential to the general concept of a proposition that it carries with it the general concept of coordination with a state of affairs’ (Sullivan, 1996, p.209). It is this internal relation, I have argued, that Wittgenstein investigates in his account of logical portrayal. The current suggestion for the role of the opening remarks of the *Tractatus* is that Wittgenstein is allowing the reader to repeat the journey that, on Sullivan’s account, he himself has already made. Thus, we begin by supposing that we are concerned with cataloguing the logical forms or possibilities that really exist and that any language that represents the world must match. The investigation of the logic of portrayal that follows brings us to the realization that matters are quite different from what we originally supposed. What we come to see is that language and the world are internally related and that there is no

question of a match as something that needs to be established. We now see that the task we are concerned with does not take us outside language; our task is one of clarifying, from inside language, how language signifies in the way that it does. The logical form of the world is mirrored in the essential logical structure of a language in which the world is represented. Thus, what first of all appeared to us to be a metaphysical basis for the logical structure of language is now recognized as nothing more than the expression of the logical structure that is internal to language, and essential to its capacity to express thoughts that are true or false. Yet it remains the case that '[l]ogic is interested only in reality' (*NB*, p.9): the idea of a method of projection in virtue of which we compare propositions with reality is essential to the idea of language. It is internal to the idea of language that the world is represented by the totality of true propositions.

Variables and Formal Concepts

1. One of the principal themes of the interpretation of the *Tractatus* that I've been presenting is that the work is shaped by Wittgenstein's sense that he is concerned with a 'single great problem': 'My whole task consists in explaining the nature of the proposition' (*NB*, p.39). All the problems that he takes himself to confront in his early work—including the status of the propositions of logic, the nature of negation, the justification of inference from one proposition to another, etc.—are seen as aspects of this single great problem. It is not, as I have emphasized, that we shall be able to *deduce*, say, the status of the propositions of logic, or the nature of negation, from the nature of the proposition. It is rather that Wittgenstein believes that if we come to see clearly how a proposition expresses its sense, then all the problems he faces will be solved in their entirety. Thus, he believes that all the problems that he takes himself to confront are already implicitly dealt with in the clarification of the logic of depiction. The investigation of the essence of logical pictures already includes everything we need to make perspicuous the status of the propositions of logic, the nature of negation, of inference, and so on. He believes that it is simply by seeing what our system of representation, as it stands in a projective relation to the world, itself makes clear that we make manifest how a proposition expresses its sense. His investigation is intended to lay bare the workings of our language. In doing so, it also allows us to see that logic takes care of itself. The problems that Wittgenstein finds in the work of Frege and Russell are not, as he sees it, real problems; they arise out of a failure to see the workings of our language clearly. All we need to do now is to look and see that all the problems have completely disappeared.

2. Wittgenstein's investigation of the logic of depiction has led him to a profound expression of a version of Frege's context principle: Only within a system of representation that stands in a projective relation to the world does a proposition have sense or a name meaning. The system of representation in its projective relation to the world is constituted by the rules of projection

that determine the place of each propositional sign in logical space, that is, that determine, for each propositional sign, the circumstances under which it is true or false. The meaning of a sign is constituted by its logical role in a symbolism that stands in a projective relation to the world. There is nothing more or less to a sign's having a meaning than its serving a logical role in a symbolism, that is, in a sign-language that is used to express propositions that can be tested against reality for truth or falsity. A proposition is a symbol and any part of a proposition that contributes to determining its sense is a symbol.

At *TLP* 3.32, Wittgenstein writes:

A sign is what can be perceived of a symbol.

What constitutes the symbol that a particular sign expresses is how it is used with a sense:

In order to recognize a symbol by its sign we must observe how it is used with a sense. (*TLP* 3.326)

Thus, Wittgenstein wants us to recognize that our investigation into how a proposition expresses its sense is directed, not towards what symbols mean (the object they signify), but towards how they symbolize: how they are used with a sense. The conception of meaning that dominates Wittgenstein's argument for simples now slips into the background and his logical investigation focuses exclusively on the use of expressions in propositions with sense. This is not, of course, the conception of use that Wittgenstein operates with in the *Investigations*; it is restricted to the idea of the use of expressions in propositions that express thoughts, or represent possible states of affairs, that is, to the idea of use of expressions with language conceived as a representing calculus. However, I want to argue that this move in the *Tractatus*, from a concern with the meaning of an expression, conceived as something that is correlated with it, to a concern with the use of an expression in a system of representation, is the root of the voice that later opposes Augustine's naive conception of how language functions.

As we saw at the end of Chapter 5, Wittgenstein first introduces the concept of a symbol at *TLP* 3.31:

I call any part of a proposition that characterizes its sense an expression (or a symbol).
(A proposition is itself an expression.)

Everything essential to their sense that propositions can have in common with one another is an expression.

An expression is a mark of a form and a content.

An expression is a symbol that makes a common contribution to the members of a class of propositions. The form of an expression is what it shares with every symbol that is substitutable for it in propositions with sense; it is equivalent to the logico-syntactic properties without which the expression would not signify in the way that it does. The content of an expression is the meaning that arbitrary conventions have assigned to this particular sign.

As we've already seen, in the case of simple, indefinable expressions, Wittgenstein reifies this meaning into an object that is correlated with the word, but it is clear that this conception of meaning plays no real role in his characterization of the concept of a symbol. An expression is presented or described by 'the general form of propositions that it characterizes' (*TLP* 3.312), that is, 'by means of a variable whose values are the propositions that contain the expression' (*TLP* 3.313). The expression constitutes a common contribution to the sense of propositions that are the values of this propositional variable. To grasp what an expression means is to grasp the contribution that it makes to determining the place of a proposition in logical space, that is, it is to grasp the rule for its use in propositions. A proposition is the limiting case of a propositional variable insofar as it is essentially composed of expressions that it has in common with other propositions; it is not itself a common characteristic of a class of propositions, but it has characteristics in common with members of a class of propositions. It is vital to Wittgenstein's understanding of propositional variables that he does not treat generality as a logical primitive: an expression cannot have two logical roles, one in propositions containing names (i.e. in elementary propositions) and another in propositions containing the sign for generality.

3. At *TLP* 3.314, Wittgenstein writes:

An expression has meaning only in a proposition. All variables can be construed as propositional variables.

(Even variable names.)

It is clear from this that Wittgenstein does not regard a propositional variable itself as a representing expression. A propositional variable does not signify or stand for anything: an expression has meaning only in a proposition. A propositional variable is, as we've just seen, a way of presenting a symbol. It is equivalent to a rule for the construction of all the propositions of which the expression is a constituent. In the limiting case, in which all constants have been turned into variables, the variable 'corresponds to a logical form—a logical prototype' (*TLP* 3.315). Thus, a logical form does not represent or signify anything; it is

equivalent to a rule for the construction of a class of propositions. Each member of the class is constructed according to a common logical plan; it is this that they have in common. The rule that constitutes a propositional variable is given by stipulating or fixing the values of the variable: ‘What values a propositional variable may take is something that is stipulated. The stipulation of the values is the variable’ (*TLP* 3.316). A propositional variable is a way of presenting a class of propositions, and is given by stipulating the propositions that are its values. A propositional variable has to do with symbols, and not with what symbols mean, that is, not with what they signify.

Wittgenstein’s treatment of variables stands in sharp contrast to that of Frege and Russell, who, as we saw in Chapter 3, treat variables as logical primitives that range over, or ambiguously refer to, the *Bedeutungen* of a class of symbols. Thus, a variable is introduced into the symbolism in connection with the quantifiers, as a sign which ambiguously represents the members of a class of entities, all of which belong to the same logical category: individual, function, proposition, number, and so on. For Wittgenstein, variables are a means of presenting a symbol. A variable is a rule for constructing the class of propositions that are its values. Thus:

The stipulation [of its values] will therefore be concerned only with symbols, not with their meaning.

And the *only* thing essential to the stipulation is *that it is merely a description of symbols and states nothing about what is signified*.

How the description of the propositions is produced is not essential. (*TLP* 3.317)

At *TLP* 5.501, Wittgenstein gives an example of how a variable, ξ , that has propositions as its values might be stipulated. He lists three ways: (1) by direct enumeration, ‘in which case we can simply substitute for the variable the constants that are its values’ ($\xi = p, q, r$); (2) by ‘giving a function f_x whose values for all values of x are the propositions to be described’ ($\xi = Fa, Fb, Fc, \dots$); (3) by ‘giving a formal law that governs the construction of propositions’ ($\xi = aRb; \exists x(aRx \& xRb); \exists x \exists y(aRx \& xRy \& yRb) \dots$). What is clear is that in all of these methods for the stipulation of the values of a propositional variable we are concerned with the description or determination of a class of symbols, and not with what symbols mean. A variable is not an expression that ambiguously denotes the members of a logical category, but is a sign that is used as a means to present a class of expressions: the values of the variable.

Thus, Wittgenstein is careful to distinguish the logical role of variables from that of the expressions that are its values. The general proposition ($\exists x$) Fx

does not contain a constituent— $(\exists x) \dots x$ —in which x does indeterminately or ambiguously what a , in Fa , does determinately.¹ Rather, the propositional sign $(\exists x)Fx$ indicates a logical prototype— Fx —which is a means of presenting a class of propositions: all the propositions that are the values of the prototype, namely, Fa , Fb , Fc , and so on. Fx does not, on Wittgenstein's account, have two roles: one in elementary propositions and another in quantified propositions. Fx is a logical constituent of all the elementary propositions that are its values; and the logical prototype, Fx , can be used to describe or determine this class of propositions. Thus, Wittgenstein treats general propositions differently from the way they are treated by Frege and Russell.

Wittgenstein's understanding of the role of propositional variables provides the context for the following remark:

Like Frege and Russell I construe a proposition as a function of the expressions contained in it. (*TLP* 3.318)

The preceding investigation of the nature of propositional variables suggests that there is an implicit emphasis here on the word 'expressions'. An expression is 'part of a proposition that characterizes its sense'. For Wittgenstein, the expressions that characterize the sense of a proposition comprise the indefinables that are the constituents of elementary propositions and, in the limiting case, elementary propositions themselves. As we shall see, his ultimate aim is to show that there are no other expressions that have a substantive meaning. All the content of language (i.e. everything that contributes to the sense of propositions) is contained in elementary propositions and, ultimately, in the indefinables that are the logical constituents of elementary propositions. A propositional variable is a way of presenting what all the elementary propositions that are its values have in common; it is not a constituent in a second-level concept $(\exists x) \dots x$ that takes a first-level concept as argument. Thus, the role of a propositional variable in general propositions is to present a logical prototype; it does not form an integral part of a symbol—a quantifier—that occurs as a logically primitive constituent in $(\exists x)Fx$. Wittgenstein's investigation of the nature of variables, and the nature of their connection with formal concepts, is a first step in his attempt to make clear that there is no science of logic: insofar as variables are definitive of logic, logic does not represent.

¹ Wittgenstein's treatment of generality is discussed more fully in Chapter 10.

4. The transformation in Wittgenstein's approach to clarifying the workings of language that is brought about by his understanding of the context principle is, as I just remarked, to turn our attention away from a concern with what signs mean or signify and towards how they symbolize, that is, towards their role in determining the sense of propositions. At *TLP* 3.32, Wittgenstein writes:

A sign is what can be perceived of a symbol.

To recognize a symbol by its sign, we 'must observe how it is used with a sense' (*TLP* 3.326). One sign can be common to two different symbols, but if they signify in different ways, then they have nothing in common except an arbitrary sign. Wittgenstein suggests that ordinary language obscures different modes of signification by employing words that symbolize differently in superficially similar ways. His criticisms of Frege and Russell are, in general, an attempt to show that they are misled by superficial similarities between signs into blurring over fundamental logical distinctions in modes of symbolizing, in particular, as we saw earlier, he focuses on the temptation to assimilate propositions to names, to treat the logical constants as predicates and relations, and to treat '... judges ...' as a relational expression. His criticisms are intended to draw attention to logical differences that are manifest in the use of signs, but which a superficial similarity between signs can lead us to neglect. At *TLP* 3.325, Wittgenstein acknowledges that the conceptual notation of Frege and Russell is a sign-language 'that is governed by *logical* grammar—by logical syntax', but it is not on its own enough 'to exclude all mistakes'. I take it that what Wittgenstein means by this is that it is only by attending to the logical distinctions that a conceptual notation helps us to reveal that we will achieve the clarity needed to avoid the confusions of which philosophy is full. Frege's *Begriffsschrift* is a tool of clarification insofar as it provides an opportunity to see logical distinctions clearly, that is to say, we can use it in an investigation whose aim is to clarify the logical workings that are essential to our system for representing states of affairs in propositions.²

² Some support for this way of understanding Wittgenstein's remark comes from his criticisms of Frege and Russell's treatment of generality. Although Wittgenstein accepts their generality notation, he does not think this notation is enough on its own to clarify the nature of general propositions. Wittgenstein's treatment of generality shows that he believes that, in an important sense, Frege and Russell misunderstand the significance of their own logical notation. They treat $(\exists x) \dots x$ as a logical primitive, and thus run together two distinct ideas: all the values of a logical prototype (all values of Fx for all values of x) and a truth-function of these propositions (\exists = the logical sum; \forall = the logical product). This is dealt with further in Chapter 10.

Ordinary language invites confusion insofar as it fails to make logical distinctions clear. A sign-language ‘that is governed by logical syntax’ would be one that does ‘not [use] in a superficially similar way signs that have different modes of signification’ (*TLP* 3.325). A sign-language governed by logical syntax would be one that enabled us to make all of the following distinctions clear: between names and functions, between propositions and names, between logical constants and functions, and so on. A sign-language governed by logical syntax will be one in which we can see clearly what is essential to each mode of signification. Because what symbolizes in a symbol—i.e. what is essential to its being the symbol that it is—is what it shares with every symbol that is substitutable for it in a proposition with sense, the distinctions that a sign-language governed by logical syntax enables us to make clear have nothing to do with the meanings of individual signs, that is, with what signs signify, but only with a sign’s mode of signification, that is, with its logico-syntactic properties or form. Everything that is essential to a sign in such a sign-language can therefore be expressed by means of a propositional variable or logical prototype. Thus:

In logical syntax the meaning of a sign should never play a role. It must be possible to establish logical syntax without mentioning the *meaning* of a sign: *only* the description of expressions may be presupposed. (*TLP* 3.33)

Wittgenstein goes on:

From this observation we turn to Russell’s ‘theory of types’. It can be seen that Russell must be wrong because he had to mention the meaning of signs when establishing the rules for them. (*TLP* 3.331)

According to Wittgenstein, a sign’s mode of signification is expressed by means of a variable that presents what all the values of the variable have in common. A variable does not occur as a representing part of a proposition—i.e. as an integral part of a quantifier—but it presents a rule for the construction of a class of propositions. Russell’s view of the role of the variable in general propositions, namely, as an expression that stands for any term, requires him to impose a restriction on the range of a variable, in order to avoid the paradoxes. Thus, the theory of types requires that a propositional function (i.e. what Wittgenstein calls a ‘propositional variable’) is given by means of a variable *together with* a specification of a restriction on which terms can be taken as arguments. Russell’s vicious-circle principle ensures that a propositional function belongs to a logical category that is of a higher order than its arguments. It is possible

to refer to all the arguments for which a propositional function is true only if all the arguments are of the same type and the type is lower than that to which the propositional function itself belongs. Thus, Russell is forced ‘to mention the meaning of signs’—i.e. the objects that are the *Bedeutungen* of signs—in specifying the range of a bound variable.

On Wittgenstein’s understanding of the role of propositional variables, Russell’s vicious-circle principle is completely redundant. A propositional variable is arrived at by turning a constituent of a proposition into a variable and is to be thought of as a rule for the construction of a class of propositions, namely the class of propositions that have the propositional function as a constituent. A variable presents a logical prototype. Insofar as no propositional symbol can be a constituent of itself, no propositional symbol can share a mode of signification with an expression that is its logical constituent. There is no logical prototype that presents what a proposition and a constituent of the proposition have in common. Thus, no propositional symbol can be a value of x in a propositional variable, Fx , that is arrived at by turning a constituent of the proposition into a variable. The meanings of the signs do not have to be mentioned. It is the essential difference in the mode of signification between a propositional symbol and a constituent of a proposition that rules out the possibility of any proposition’s making a statement about itself. Thus:

No proposition can make a statement about itself because a propositional sign cannot be contained in itself (that is the whole of the ‘theory of types’). (*TLP* 3.332)

5. Wittgenstein goes on to spell out the redundancy of Russell’s theory of types for the case of propositional functions—i.e. to show that no propositional function can be its own argument—as follows. A propositional function is presented by means of a propositional variable that is arrived at by turning the argument of a function into a variable. For example, if we start with a proposition, $F(a)$, we construct a propositional variable that presents the functional expression by turning the constant, ‘ a ’, into a variable: $F(x)$. The values of the variable, $F(x)$, will be all the propositions that contain the function, $F(x)$, as a constituent. This variable already makes clear what kind of expressions can complete the function to form a proposition, that is, ‘it will already contain the prototype of its argument’ (*TLP* 3.333). Wittgenstein now goes on to show that no function can share a mode of signification with the expressions that are its arguments. That is to say, there is no variable that presents what a propositional function and its argument have in common. Wittgenstein spells the point out as follows:

For let us suppose that the function $F(fx)$ could be its own argument: in that case there would be a proposition ' $F(F(fx))$ ', in which the outer function F and the inner function F must have different meanings, since the inner one has the form $\varphi(fx)$ and the outer one has the form $\psi(\varphi(fx))$. Only the letter ' F ' is common to the two functions, but the letter by itself signifies nothing. (*TLP* 3.333)

Suppose the function $F(fx)$ means ' fx is not true of itself', for example, " x is a man" is not true of the function " x is a man". Russell's paradox arises when we apply this function, $F(fx)$, to itself: $F(F(fx))$. The resulting proposition, " fx is not true of itself" is not true of " fx is not true of itself", is false if it is true, and true if it is false. The paradox depends upon our treating the outer function F and the inner function F as the same function. Wittgenstein's claim is that the paradox disappears as soon as we recognize that in a proposition of the form $F(F(fx))$, the inner function F , which has a function as argument and a proposition as value, cannot be the same function as the outer function F , which has a proposition as argument and a proposition as value. Thus, $F(F(fx))$ does not contain two occurrences of the same symbol. We can see this if we turn the constants of the proposition into variables: $\psi(\varphi(fx))$. For now it is clear that the inner functional expression, $\varphi(fx)$, is of a distinct logical form from the outer functional expression, $\psi(\varphi(fx))$. It is clear that we have two distinct propositional variables, or logical prototypes, and therefore two distinct symbols, or ways of symbolizing. If we present the symbols by means of propositional variables, the variables already make clear that the inner function and the outer function are completely different kinds of expression, for they each take a different form of expression as argument.

Thus, it becomes clear that 'the outer function F and the inner function F must have different meanings. . . . Only the letter " F " is common to the two functions, but the letter itself signifies nothing.' The propositional variables make clear that no propositional function can share a mode of signification with expressions that occur as its argument, and thus no propositional function can be its own argument. Once we recognize that distinctions in modes of signification are reflected in distinctions between variables, and thus that no variable can express what is common between symbols that signify differently, then all need for a theory of types evaporates. A variable presents a mode of signification, and signs that do not share a common logical form do not signify in the same way. Since no propositional function can share a form with its argument, no propositional function can be applied to itself. Once again, the meaning of the signs does not have to be mentioned in order to rule out a function's occurring as its own argument; the difference in the mode of

signification between a propositional function and its argument already rules out a function's being applied to itself: the inner F and the outer F cannot be the same symbol.

6. Wittgenstein's critique of Russell's theory of types amounts to the claim that logical distinctions are grounded in distinctions in modes of signification, or ways of symbolizing, that is, in the logico-syntactic properties of symbols. A symbol's mode of signifying is something that is internal to the symbolism and prior to any question of truth or falsity. The role of a variable is to present a rule for the construction of a class of propositions that have their logico-syntactic properties in common, or which are constructed according to a common logical plan. The rule that a variable expresses does not need to concern itself with what signs mean, but only with how they signify. General propositions contain a logical prototype that determines a class of propositions, and do not contain a variable that ambiguously denotes the meanings of a class of expressions. Once this is recognized, Wittgenstein believes, the problems presented by Russell's paradox do not so much as come into view: they have disappeared completely. Thus, Wittgenstein's rejection of Frege and Russell's universalist conception of logic as a science with its own indefinables and its own ontological domain is clearly expressed in his critique of Russell's theory of types. Variables do not have the role of expressions—they do not contribute to the sense of any proposition (including general propositions)—and there is no need to place restrictions on what they range over. Variables present what a class of symbols have in common, and no variable can show what is common to symbols that symbolize in different ways. It is not merely that Wittgenstein tries to show that what Russell's theory of types is designed to achieve is unnecessary, he has also tried to show that, insofar as variables are characteristic of logic, logic doesn't represent. Logic is concerned with the forms of symbols, or with their modes of signification, and not with what symbols signify.

The rules of logical syntax are the rules that are manifest in how expressions are used with a sense. Once we have a language in which we represent states of affairs, the rules of logical syntax are already in place, immanent in the use of expressions in propositions with sense:

The rules of logical syntax must go without saying once we know how each sign signifies. (*TLP* 3.334)

The rules of logical syntax constitute everything that is essential to an expression's expressing its sense, that is, to its symbolizing in the way that it does.

We cannot give a sign a meaning and then lay down rules for its use. How a sign signifies—the rules for the use of the sign—are essential to its meaning what it does.³ Wittgenstein goes on:

A proposition possesses essential and accidental features. Accidental features are those that result from the particular way in which the propositional sign is produced. Essential features are those without which the proposition could not express its sense. (TLP 3.34)

Logical syntax is concerned with what is essential to a mode of signification, that is, to something that can be established ‘without mentioning the *meaning* of a sign: *only* the description of expressions may be presupposed’ (TLP 3.33). What is essential in a symbol is shown in what all symbols ‘that can express the same sense have in common’ (TLP 3.341). Thus:

What signifies in a symbol is what is common to all the symbols that the rules of logical syntax allow us to substitute for it. (TLP 3.344)

It is, as we’ve just seen, what is presented by means of a propositional variable or logical prototype.

7. Thus we are brought to Wittgenstein’s distinction between saying and showing. In a letter to Russell, written in August 1919, Wittgenstein suggests that the ‘theory of what can be expressed (*gesagt*) by prop[osition]s—i.e. by language—and, which comes to the same, what can be *thought* and what can not be expressed by prop[osition]s, but only shown (*gezeigt*)’ is his ‘main contention, to which the whole business of logical prop[osition]s is only a corollary’ (CL, p.124). Clearly there can be no question of our understanding this distinction in the way that it is understood within a metaphysical reading of Wittgenstein’s early work, that is, as involving the claim that there are features of an independent reality that cannot be described in language, but which are shown by the use of expressions in propositions. However, there must be a way of understanding the distinction between saying and showing that makes it intelligible that Wittgenstein should have regarded it as his ‘main contention’.

Logical syntax is what is shown in the use of expressions in propositions with sense. It constitutes everything that is essential to a symbol’s signifying in the way that it does. That is to say, it is everything essential to the

³ Thus, Winch writes: ‘Proposition 3.334 reads: “The rules of logical syntax must go without saying, once we know how each individual sign signifies.” It is important that Wittgenstein writes *wie* (“how”) rather than *was* (“What”). The what will already have been settled once the how is established’ (Winch, 1987, p.9).

representation of a particular state of affairs; it is what all representations of the state of affairs have in common. What all representations of a state of affairs have in common is manifest in the logical properties of the representational elements, that is, in how the expressions that are the constituents of the proposition that represents the state of affairs are used in propositions with sense. The use of an expression makes manifest the logico-syntactic rules in virtue of which a propositional sign in which it occurs is a symbol that represents a particular state of affairs. Insofar as the rules of logical syntax are shown in the application of expressions—i.e. in how the expressions are used with a sense—they cannot themselves be presented in a proposition that can be compared with reality for truth or falsity. The rules for the use of a sign are what make it possible to compare a proposition with reality for truth or falsity; the rules themselves are prior to truth or falsity. On this interpretation, the great achievement of Wittgenstein's early work—expressed in the distinction between saying and showing—is to make clear that logic does not belong at the level of facts; logic concerns what is prior to truth or falsity, namely, how symbols symbolize, that is, something that is *shown* in the use of expressions.⁴

8. As I remarked at the beginning of Chapter 5, Wittgenstein is committed, not only to the idea that all pictures that represent a particular state of affairs have a common essence, but also to the idea that there is something that all pictures that represent possible states of affairs share, that is, to the idea of an essence of representation as such. Thus, all propositions that represent states of affairs share an essential nature. The essence of a proposition is the essence of logical depiction. Thus:

The possibility of all imagery, of all our pictorial modes of expression, is contained in the logic of depiction. (*TLP* 4.015)

In the 4s, Wittgenstein once again takes up the investigation of the essential nature of a proposition, of what all propositions, insofar as they are logical pictures of states of affairs, have in common. What all propositions have in common is what is essential to the representation of states of affairs as such; it is that without which there is no representation of reality. Insofar as what is

⁴ The distinction between saying and showing is thus one that applies to symbols: it is a distinction between what is said by means of symbols and the logico-syntactic properties in virtue of which a particular symbol signifies in the way that it does. It is not the distinction, criticized by Diamond and Conant, between two uses of language: (i) to say how things are, (ii) to elucidate what cannot be said, but only shown. What is shown has nothing to do with ineffable truths, but concerns what makes a symbol the symbol that it is, namely its use in propositions with sense. Our mastery of what shows itself is expressed in our ability to use expressions to say how things are.

essential to the projection is preserved in what is projected—i.e. in the reality that is represented—it is what any system of representation essentially has in common with the reality it depicts. It is, I suggested earlier, in this sense that we should understand Wittgenstein's claim that the clarification of the essence of a proposition is a clarification of '[w]hat any picture, of whatever form, must have in common with reality' (*TLP* 2.18). It is the clarification of what is essential to the possibility of comparing a picture with reality for truth or falsity, and as such it is essentially prior to truth and falsity:

Propositions can represent the whole of reality, but they cannot represent what they must have in common with reality in order to be able to represent it—logical form.

In order to be able to represent logical form, we should have to be able to station ourselves with propositions somewhere outside logic, that is to say outside the world. (*TLP* 4.12)

That is to say, outside the rules in virtue of which we represent states of affairs, that is, express propositions with sense.

Wittgenstein goes on:

Propositions cannot represent logical form it is mirrored in them.

What finds its reflection in language, language cannot represent.

What expresses *itself* in language, *we* cannot express by means of language.

Propositions *show* the logical form of reality.

They display it. (*TLP* 4.121)

Logical form is what is essential to any proposition's expressing a sense. Logical form is mirrored in propositions insofar as propositions themselves make clear what is essential to their expressing a sense. We have only to look into the workings of language to see what is reflected there in it, namely that in virtue of which it depicts possible states of affairs. But once again, what makes the representation of states of affairs (a proposition with sense) possible, what is presupposed in all representation as such, cannot itself be represented in a proposition. What is essential to the representation of states of affairs (propositions with sense) is everything that makes it possible to compare a proposition with reality, and is itself, therefore, prior to truth or falsity. What Wittgenstein is committed to here is not the idea that the world has an essence that is prior to or independent of language, which language must duplicate or fit, but which it cannot describe. It is rather the idea that representation itself has an essence, that is, that there are features of propositions without which they could not represent states of affairs, that is, express a sense. What is essentially in common between language and the reality it depicts—i.e. what

is essential to language's projection onto reality—shows itself in what language itself makes manifest, namely the logic of depiction. It is in this sense that 'propositions *show* the logical form of reality.' And it is insofar as what they show is what is presupposed in our ability to say how things are, that 'what *can* be shown, *cannot* be said' (*TLP* 4.1212). The logical structure of language, in virtue of which it represents what is the case, is something that is mirrored in its use and presupposed in everything that we say by means of it.

Thus, logical syntax is given with a language in which states of affairs are represented. It is what is essential to a system of representation's projection onto reality, that is, to its signifying in the way that it does. It is what makes it possible to translate one language into another; it is what all systems of representation that are projected onto reality have in common. We can now see clearly that wherever there are propositions with sense, there must already be logical order. Logic is not a matter of discovery, but simply a matter of making clear the logical order that is essential to any language's representing states of affairs in the way it does. Thus:

Now, too, we understand our feeling that once we have a sign-language in which everything is all right, we already have a correct logical point of view. (*TLP* 4.1213)

If we have a sign-language that removes the sources of confusion that are there in ordinary language—i.e. if we have a language in which propositions are expressed clearly and each mode of signifying can be clearly distinguished from every other—then we shall have achieved a correct logical point of view. We have, in a sense, already grasped the whole of logic, and our task is merely one of making it perspicuous. It is only a question of our coming to see the logical order of our language (or of the thoughts that we use it to express) more clearly, that is, of recognizing the order that is essentially already in it. There is no science of logic; logic is internal to representation; logic concerns everything that is essential to a symbolism's representing states of affairs in the way that it does; it is not concerned with general truths about the world; it does not belong to the level of facts.

9. So far we've been concerned with the logico-syntactic properties of symbols that constitute their mode of signification. These properties are, as we've seen, manifest in how symbols are used with a sense. At *TLP* 4.122, Wittgenstein writes:

In a certain sense we can talk about formal properties of objects and states of affairs, or, in the case of facts, about structural properties; and in the same sense about formal relations and structural relations.

(Instead of ‘structural property’ I also say ‘internal property’; instead of ‘structural relation’, ‘internal relation’.

I introduce these expressions in order to indicate the source of confusion between internal relations and relations proper (external relations), which is very wide spread among philosophers.)

I take it that the important shift here is from talk about the formal properties and relations of expressions, or the structural properties and relations of propositions, to talk of the formal or structural properties and relations of what these expressions represent. Logical form is what is shared by all propositions that represent a particular state of affairs. Insofar as the logical form of a representation is preserved in what is projected, logical form is what propositions and the reality they represent essentially have in common. In this sense, we can talk of the formal or structural properties and relations of what expressions represent: the formal properties and relations of what expressions represent are mirrored in the formal properties and relations of the expressions that represent them. It is clear that Wittgenstein is not to be understood as claiming that transcendent entities, independent of language, possess both essential and empirical properties, and that the essential properties of transcendent entities are the ground of the logico-syntactic properties of the expressions that represent them. Rather, the idea is that the logical properties and relations of symbols reflect the logical properties and relations of what these symbols represent. We cannot, of course, express these properties and relations of what symbols represent by saying that the world contains this kind of thing and that kind of thing, or by saying that this state of affairs stands in this relation to that one. To do so would be to treat logic, which is prior to the expression of propositions that are true or false, as if it belonged to the level of facts. The logical order of the world that is represented in language, like the logical order of language itself, is made manifest in the use of expressions in propositions with sense. Thus, Wittgenstein goes on:

It is impossible, however, to assert by means of propositions that such internal properties and relations obtain: rather, this makes itself manifest in the propositions that represent the relevant states of affairs and are concerned with the relevant objects. (*TLP* 4.122)

At *TLP* 4.124, Wittgenstein writes:

The existence of an internal property of a possible situation is not expressed by means of a proposition: rather it expresses itself in the proposition representing the situation by means of an internal property of that proposition.

It would be just as nonsensical to assert that a proposition had a formal property as to deny it.

Thus, for example, the occurrence of a particular object as a constituent of a possible situation is not expressed by means of a proposition, but makes itself manifest by means of an internal property of the proposition that represents that situation. That is, it makes itself manifest by means of the occurrence of the name of the object as a logical constituent of the proposition that represents the state of affairs. The occurrence of the name in the proposition is in turn manifest in a common characteristic that is shared between this proposition and the members of the class of propositions in which the name is a common constituent. Thus, the internal properties of a possible situation are manifest in the logical order of the system of representation to which the proposition representing it belongs and in virtue of which it determines a place in logical space. It is expressed in the logical order of language—i.e. in that in virtue of which language represents—and it cannot be represented.

Wittgenstein elucidates this final point further as follows:

It is impossible to distinguish forms from one another by saying that one has this property and another that property: for this presupposes that it makes sense to ascribe either property to either of them. (*TLP* 4.1241)

The logical order of our system for representing states of affairs in propositions is a matter of how symbols symbolize. We cannot distinguish logical forms by saying that things of one form have a property that things of another form lack, for logical form is a matter of how symbols symbolize, and not a matter of what properties characterize the things that symbols stand for or mean. Distinctions in logical form cannot be expressed in propositions, but are rather made manifest in distinctions in how symbols symbolize, that is, in how they are used in propositions with a sense. Symbols that symbolize in different ways—i.e. that are not substitutable for one another in propositions with sense—belong to distinct logical categories and the same can be said of what they represent. Logical differences between what symbols represent is made manifest in logical differences between symbols; the difference cannot be expressed in a proposition, but it makes itself manifest in how the symbols are used with a sense.

10. Internal relations between states of affairs are, on this understanding, grounded in internal relations between the symbols that represent them within a system of representation that stands in a projective relation to the world. There is nothing outside language that grounds these internal relations; they characterize the system by means of which we represent states of affairs and

they mirror the internal relations between the states of affairs that are represented. Thus:

The existence of an internal relation between possible situations expresses itself in language by means of an internal relation between the propositions representing them. (*TLP* 4.125)

Wittgenstein goes on:

Here we have the answer to the vexed question 'whether all relations are internal or external'. (*TLP* 4.1251)

This remark and the one following (*TLP* 4.1252) make a clear reference to Russell. Russell had argued against the intelligibility of internal relations and held that all relations are external. He had argued, in particular, that the notion of a series requires external, transitive, asymmetrical relations by means of which the terms of the series are ordered. Wittgenstein does not dispute the existence of external relations or their role in constructing ordered lists of objects. However, he believes that in denying internal relations, Russell has failed to observe a logical distinction, namely the distinction between relations between things, which are asserted in empirical propositions of the form aRb , and logical or internal relations between symbols (and thus, derivatively, between what symbols symbolize), which are shown by the symbols themselves, independently of what they mean. Internal relations, unlike external relations, have nothing to do with what symbols mean, but concern only the relations between the symbols themselves, which are internal to the symbolism of which they are a part. They are not hypothetical relations between objects, established on the basis of experience, but relations between expressions that are shown by the symbols themselves, independently of experience. Wittgenstein now distinguishes formal series from empirical series and tries to show that the relation *successor of* is a formal or internal relation. Thus, he believes that Russell assimilates the formal relation *successor of* to an external relation between objects, for example, to the transitive, asymmetrical relation *father of*, which can be used to order objects, and which says something about the meanings of the names that occur in its argument places.

Wittgenstein now goes on to make clear the distinction between a formal series and an empirical series, and between a formal or internal relation and an external relation, which he believes Russell neglects. There is a logical distinction between an empirical series that is ordered by means of an external relation and a formal series that is ordered by means of an internal relation between the symbols that are the terms of the series. In the latter case, we do not have a series

of objects that is determined by an external relation that holds between individual pairs of objects, but a series of forms that is the result of the application of a rule to a symbol in such a way that we are able to generate, for any symbol that is a term of the series, the term that follows it in the series. Wittgenstein holds that the number series is a formal series in this sense, that is, it is not a series of objects ordered by a real relation between individual pairs of objects, but is a series of forms that is constructed according to a formal law. The same, he suggests, is true of the following series of propositional forms:

$$\begin{aligned} & 'aRb' \\ & '(\exists x) : aRx \ \& \ xRb' \\ & '(\exists x, y) : aRx \ \& \ xRy \ \& \ yRb' \\ & \text{and so forth. (TLP 4.1252)} \end{aligned}$$

The first propositional form (i.e. the first line in the above list) gives the first term in the series; the second propositional form (i.e. the second line in the above list) the second; the third propositional form (i.e. the third line in the above list) the third; and so on. The rule that takes us from one propositional form to the next in this list of propositional forms can always be applied to the result, so that, for any propositional form belonging to the series, we can always construct the next propositional form in the series.

Wittgenstein goes on:

(If b stands in one of these relations to a , I call b a successor of a .)

Imagine that we have a series of propositions that is a value of one of the above series of propositional forms. The individual propositions that occur as conjuncts, in any instance of one of these propositional forms, are clearly empirical propositions whose truth must be established on the basis of experience. However, insofar as we are presented with an instance of a member of this formal series, the internal relations that characterize the formal series also characterize the symbols that occur in its instances. Wittgenstein now shows that the relation *successor of* is a formal relation in this sense. That is to say, he shows that the successor relation concerns relations between symbols in any ordered list of propositions that is an instance of one of the above propositional forms, and applies derivatively to what those expressions stand for. The *successor of* relation is something that expresses itself in the relation between symbols, rather than by means of a proposition that describes a relation between what those expressions stand for. Thus, that b is a successor of a is not expressed by a proposition of the form bRa , but by the fact that b occurs after a in a list of propositions that is an instance of a member of the formal

series given above. What the names ‘*a*’ and ‘*b*’ stand for, or what the external relation expressed by ‘*xRy*’ is, is irrelevant; it is only the relation between the symbols that matters. Thus, whatever *a* and *b* are, if they occur as constituents in a particular instance of one of the propositional forms in the above formal series, then we can say that *b* is a successor of *a*.

The series of forms that Wittgenstein gives in *TLP* 4.1252 is an example of a formal series. The principle of a formal series—i.e. of a series based on an internal relation between the forms of the symbol that belong to the series—operates independently of what symbols mean and is presented by means of a variable that specifies the ‘first term and the general form of operation that produces the next term out of the proposition that precedes it’ (*TLP* 4.1273). This variable presents a series of forms constructed by means of a rule such that, given any form belonging to the series, we can construct the form that follows it in the series. Thus, we can construct hierarchies of forms of symbol by means of a base together with a rule for the construction of an arbitrary member of the hierarchy from the member of the hierarchy that precedes it. In the case of a formal series, the totality of the members of the series is given by means of the first term and the rule for construction of the next term of the series from an arbitrary term; it essentially involves the notion of ‘and so on’. By contrast, the totality of an empirical series is given by means of an ancestral property of the members of the series: ‘the ancestors of Queen Elizabeth 2’, ‘the descendents of William the Conqueror’, and so on. Insofar as the number series is a formal series, ‘number’ is an expression for a formal concept that is given by means of a variable that is the law of a formal series; it is not an expression for a genuine concept that says something about the meaning of a sign; it does not express an ancestral property of the objects of a series, but the formal concept ‘term of that series of forms’.

At *TLP* 4.1273, Wittgenstein turns to the question how ‘to express in conceptual notation the general proposition, “*b* is a successor of *a*”’. Insofar as ‘*b* is a successor of *a*’ is a formal concept, it is expressed by means of a variable. Thus, what we require is a variable that expresses ‘*b* is a successor of *a*’. Wittgenstein goes on:

We require an expression for the general term of the series of forms

$$\begin{aligned} &aRb \\ &(\exists x)aRx.xRb \\ &(\exists x, y)aRx.xRy.yRb \\ &\dots \end{aligned}$$

That is to say, we need the general term of the series of forms that expresses what all symbols that stand in the internal relation *successor of* have in common. To say that '*b* is a successor of *a*' is to say that there is some instance of one of the propositional forms of this formal series which is true and in which *a* and *b* are assigned as values to the schematic letters '*a*' and '*b*'. Thus, the general proposition '*b* is a successor of *a*' is not something that is expressed by means of a proposition of the form aRb , but is expressed by means of a variable that expresses what all series that are ordered relative to an external relation, xRy , have in common. That is to say, it is given by 'the general term of a series of forms' (*TLP* 4.1273), and it does not need to mention the meaning of expressions. At *TLP* 5.2522, Wittgenstein introduces the following sign for the general term of a series of forms that is produced by the repeated application of a rule:

Accordingly, I use the sign $[a, x, O'x]$ for the general term of the series of forms $a, O'a, O'O'a \dots$. This bracketed expression is a variable: the first term of the bracketed expression is the beginning of the series of forms, the second is the form of a term x arbitrarily selected from the series, and the third is the form of the term that immediately follows x in the series.

Wittgenstein does not specify, for the above hierarchy of propositional forms, the operation that produces one member of the hierarchy from the member that precedes it. However, insofar as it is a series of forms, and insofar as 'the concept "term of that series of forms" is a *formal* concept', it is given by means of a variable of the form $[a, x, O'x]$. Wittgenstein's treatment of '*b* is a successor of *a*' contrasts with that of Frege and Russell, on which it is taken to express a genuine relation between objects. Both Frege and Russell regard the number series as an ordering of objects in which each member of the series stands in the real relation of *successor of* to the member that immediately precedes it. Wittgenstein believes that this is to treat a formal relation, which is expressed by means of a series of forms constructed by the repeated application of an operation, on the model of an external relation between objects. Wittgenstein suggests (*TLP* 4.1273) that it is this mistake that leads to Russell's paradox.

11. At *TLP* 4.123, Wittgenstein gives the following example of an internal relation:

(This shade of blue and that one stand, eo ipso, in the internal relation of lighter to darker. It is unthinkable that *these* two objects should not stand in this relation.)

The idea that 'lighter than' and 'darker than', as they are used to describe the relationship between colours, are internal relations is one that Wittgenstein

appears to be committed to throughout his philosophical career.⁵ Thus, in the remarks made just before his death and collected in *Remarks on Colour*, he writes:

A language-game: report on the greater lightness or darkness of bodies.—But now there is a *related* one: state the relationship between the lightness of certain *colours*. (Compare: the relationship between the lengths of two given sticks—the relationship between two given numbers.)

The form of the proposition is the same in both cases (“*X* is lighter than *Y*”). But in the first language-game they are temporal and in the second non-temporal. (*ROC*, p.34)

However, in the context of the current interpretation of Wittgenstein’s treatment of internal relations in the *Tractatus*, the example is a problematic one, for it is not clear how it constitutes an example of a series of symbols that is ordered by an internal relation between the symbols, rather than a series ordered by an external relation between objects. The comparison with the numerical case, which Wittgenstein himself makes in ‘Some Remarks on Logical Form’, and which he alludes to in the remark just quoted from *Remarks on Colour*, suggests that he believes that, just as the concept of number is defined by a rule for the construction of the numerical series, so the concept of colour is defined by a rule for the construction of the colour series, for example, as presented in the colour-wheel. In the later philosophy, it is clear that Wittgenstein thinks that the colour-wheel is itself a part of the symbolism, in the sense that the ordered colour samples of the colour-wheel constitute an instrument of our language, by means of which the logical order of our colour concepts is presented. However, it is not clear that he held this view at the time of writing the *Tractatus*, where he seems to suggest that the logical order of colour-space will be revealed through the logical analysis of colour terms (see *TLP* 6.3751).

Thus, a reading of *TLP* 4.123 that is more consistent with his general approach to internal relations is one that takes Wittgenstein to have in mind some form of analysis of colour terms, on which the symbols for colours are themselves constructed in the form of a series governed by an internal relation. The analysis that Wittgenstein sketches in ‘Some Remarks on Logical Form’, only to reject it as inadequate, offers some support for this suggestion.

⁵ It is important to note that here we are talking about the internal relation between *colours*; we are not talking about colours as a material property. In the *Notebooks*, Wittgenstein remarks ‘[t]hat the colours are not properties is shown by the analysis of physics, by the internal relations in which physics displays the colours’ (*NB*, p.82).

In this case, there would be a specific term for each shade of blue, and we could tell from the colour symbol alone where it stands in the series of colour terms. The ordering of the colours, like the ordering of numbers in the number series, could then be seen as a reflection of the logical order of the series of symbols that constitute the hierarchy of colour concepts. However, it may be that Wittgenstein had nothing very clear in mind, but was simply expressing an intuition that our colour concepts form a hierarchy—stand in an internal relation to one another—and that the possibility of presenting them in a formal series is implicit in the system of representation within which we use colour concepts in the description of possible states of affairs in visual space. Either way, his thought is that our colour concepts can be presented in a hierarchy ordered by an internal relation between the symbols and thus independently of the truth or falsity of any empirical proposition.

12. At *TLP* 4.126, Wittgenstein introduces the notion of a formal concept:

We can talk about formal concepts, in the same sense that we speak about formal properties.

He goes on:

(I introduce this expression in order to exhibit the source of the confusion between formal concepts and concepts proper, which pervades the whole of traditional logic.)

There is, in other words, some confusion surrounding the notion of a formal concept that needs to be cleared up. It is, at bottom, the failure to recognize that formal concepts are concerned with symbols and their modes of signifying, as this is manifest in their employment in propositions with sense, and not with what symbols signify. We can talk of the formal properties of objects and states of affairs ‘in a certain sense’, but as we’ve just seen, this talk is parasitic on the formal properties of the expressions that represent them. As such, what the talk amounts to finds its expression in the use of the relevant signs; it cannot be represented by means of a proposition. If we don’t see this clearly, then we may be tempted to treat ‘object’, ‘number’, ‘complex’, ‘fact’ as genuine concepts that have an extension, that is, that pick out a category of things by means of a property, in the way that ‘book’ picks out a class of things by means of a property. To think of a formal concept as corresponding to an ontological category is, Wittgenstein suggests, effectively to think of them as concepts that are true of some things and false of others. This is what he

means when he says that Frege and Russell think of formal concepts as ‘functions or classes’: they are thinking of a formal concept as characterizing what symbols signify, rather than how symbols symbolize.

Wittgenstein now goes on:

When something falls under a formal concept as one of its objects, this cannot be expressed by means of a proposition. Instead it is shown in the very sign for the object. (A name shows that it signifies an object, a sign for a number that it signifies a number, etc.) (*TLP* 4.126)

It cannot be expressed by means of a proposition because it does not ascribe a property to what a sign signifies or stands for. Rather, it concerns the mode of signification, whereby a symbol signifies or represents what it does. It is not the case that Wittgenstein rules out the possibility of expressing that something falls under a formal concept in a proposition on the grounds that any such putative proposition would fail to meet the requirement of bipolarity. What lies behind his remark is, rather, an attempt to get us to recognize that the logical order of our language, in virtue of which it represents states of affairs in the way that it does, does not characterize, or derive from, the nature of what the expressions of our language signify. The logical order of our language concerns how symbols symbolize and thereby signify what they do. Formal concepts concern modes of signification and that is something that can be established ‘without mentioning the *meaning* of a sign: *only* the description of expressions may be presupposed’ (*TLP* 3.33). A mode of signification is what is shown in what all symbols ‘that can express the same sense have in common’ (*TLP* 3.341). Talk of what a sign signifies falling under a formal concept does not attribute a property to it, but simply recognizes it as the meaning of an expression that signifies in a particular way. And as we saw earlier, the way in which a sign signifies is presented, not by means of a proposition, but by means of a propositional variable that presents what is common to a class of expressions. Thus:

Formal concepts cannot, in fact, be represented by means of a function, as proper concepts can.

For their characteristics, formal properties, are not expressed by means of functions.

The expression for a formal property is a feature of certain symbols.

So the sign for the characteristics of a formal concept is a distinctive feature of all the symbols whose meanings fall under the concept.

So the expression for a formal concept is a propositional variable. (*TLP* 4.126)

A propositional variable does not represent; it is a way of presenting what is common to a class of expressions: 'a feature of certain symbols'. Only the expressions that are the values of the variable have a meaning. A propositional variable corresponds to a formal concept: it presents a mode of signification that is common to a class of expression. However, we can talk, 'in a certain sense', about the meaning of an expression falling under a formal concept, but again we need to recognize that this talk is parasitic on the formal properties of expressions, and does not characterize a property of what the expression represents. A formal concept does not ascribe a property to what a sign signifies, but we can, in this purely parasitic way, talk of what a sign signifies falling under the formal concept that characterizes the sign:

The propositional variable signifies the formal concept and its values signify objects that fall under the concept. (*TLP* 4.127)

What a sign signifies—the meaning of a sign—is internally related to its mode of signification, and, in this sense, we can talk of what a sign signifies falling under a formal concept. Thus:

Every variable is the sign for a formal concept.

For every variable represents a constant form that all of its values possess, and this can be regarded as a formal property of those values. (*TLP* 4.1271)

Wittgenstein illustrates the point as follows:

Thus the variable name 'x' is the proper sign for the pseudo-concept *object*.

Whenever the word 'object' ('thing', etc.) is correctly used, it is expressed in conceptual notation by a variable name.

For example, in the proposition, 'There are two objects which . . .' it is expressed by ' $(\exists x, y) \dots$ '. (*TLP* 4.1272)

A formal concept does not ascribe a property to what a sign signifies. A formal concept corresponds to a variable that represents what is shared by all the expressions that are substitutable for it. The constant form that is shared by all the values of a variable can be regarded as a formal property of those values. It is in this sense that we can talk of what a sign signifies falling under a formal concept. Thus, whenever an expression for a formal concept is correctly used, its role is that of a variable in a proposition that contains a prototype. For example, the sign 'object' is correctly used in the proposition, 'There are two objects which . . .', insofar as we can express this proposition in conceptual notation by using two distinct variable names, x and y .

Wittgenstein goes on:

Whenever [the word 'object'] is used in a different way, that is as a proper concept-word, nonsensical pseudo-propositions are the result. (*TLP* 4.1272)

This is not because using the word 'object' as if it signified a proper concept is an attempt to say something that is true of what is signified by an expression, but cannot be said. It is rather that the logical role of the word 'object' is not to attribute a property to what is signified by an expression.⁶ Its role is that of a variable in a propositional function: it presents what all the expressions that can occur as arguments of the function have in common. Thus, the word 'object' does not correspond to a genuine function, but it does express, or present, a mode of signification. In this sense, the variable that corresponds to a formal concept does present something that makes itself manifest in the use of expressions. However, what makes itself manifest is how the expression symbolizes, that is, something that is internal to the symbolism. If we fail to recognize that formal concepts correspond to how symbols symbolize, and do not characterize a property of what they signify, then nonsensical pseudo-propositions are the result. We recognize the real nature of formal concepts when we recognize both their connection with variables and the role of variables in the symbolism. Once all this is clear, then we shall no longer be tempted to use formal concepts as if they were proper concept-words, that is, as if they characterized a property of what a symbol signifies. Thus, we shall be in a position to recognize that the sentences 'There are objects', 'A is an object', and so on are strictly nonsensical: there is no first-level predicate, '... is an object', that occurs in the expression of propositions with sense. This is not, of course, to say that this predicate—i.e. this sign—could not be given a meaning, but only that no meaning for it has so far been determined.⁷

⁶ This interpretation of the say/show distinction and the nature of formal concepts does not, therefore, attribute what Conant calls 'the substantial conception of nonsense' (see, e.g., Conant, 2002) to Wittgenstein. On this interpretation there simply is no thought, either effable or ineffable, that attributes the property of being an object to the meaning of an expression. Diamond makes the same point as follows: 'Really to grasp that what you were trying to say [with the words 'A is an object'] shows itself in language is to cease to think of it as an inexpressible *content*: *that which* you were trying to say' (Diamond, 1988/1991a, p.198). The role of the word 'object' is that of a variable, i.e. it presents a particular mode or way of signifying. It is not a matter of recognizing that there is something that is true of the meaning of words, but cannot be said. It is rather a matter of recognizing a logical distinction in the role of the expression 'object' and, e.g. the role of the expression 'book', i.e. something that is made clear by a logical investigation of how the words of our language signify.

⁷ This interpretation of what is wrong with 'A is an object' does not, as Goldfarb puts it, 'leave us with some sense of an inexpressible feature of reality' (Goldfarb, 1997, p.69). The interpretation

Wittgenstein sums up the difference between his treatment of variables and Russell's as follows:

A formal concept is given immediately any object falling under it is given. It is not possible, therefore, to introduce as primitive ideas objects belonging to a formal concept *and* the formal concept itself. So it is impossible, for example, to introduce as primitive ideas both the concept of a function and specific functions, as Russell does; or the concept of a number and particular numbers. (*TLP* 4.12721)

A formal concept is not a genuine concept—i.e. a genuine undefinable—that is introduced in addition to the expressions that are its values. A formal concept is introduced at the same time as the expressions that are its values, and its expression—a variable—is introduced via its instances, that is, by replacing the constants in a proposition with a variable expression. A formal concept corresponds to a mode of signification, the form of a symbol, and is not something that can be represented. The possibility for presenting a way of symbolizing by means of a variable is introduced at the same time as the symbol, but what a variable presents cannot be expressed as a primitive expression, that is, as a genuine concept. For a variable presents what is shared by all the expressions that are its values, and does not characterize a property of what a symbol signifies.

13. At *TLP* 4.1274, Wittgenstein writes:

To ask whether a formal concept exists is nonsensical. For no proposition can be the answer to such a question.

(So, for example, the question 'Are there unanalysable subject–predicate propositions?' cannot be asked.)

As we've just seen, a formal concept is given immediately any object falling under it is given, that is to say, immediately we have expressions that are values of the variable that corresponds to the formal concept. A formal concept corresponds to a way of symbolizing. The existence of a formal concept is not a matter of whether something exists in reality, and there is no

does not claim that '*A* is an object' fails some test of sensicality; it does not claim, e.g. that the sentence is nonsense *because* it fails the bipolarity test. There is no residual sense, therefore, that there is something that we *cannot* say. However, nor is it the case that the interpretation simply takes the sentence '*A* is an object' and shows that we have failed to give a meaning to the words '*...* is an object', as they occur in this sentence. Rather, it is claimed that, by coming to see the nature of formal concepts, and their connection with how symbols symbolize, more clearly, we recognize that the word 'object' corresponds to a variable (something that presents a mode of signification), rather than a first-level concept (something that attributes a property to the object that is the meaning of a sign).

proposition that asserts the existence of something that falls under a formal concept. Whether a formal concept exists is simply a question of whether we have given a sign of a certain form an application. It is not a question whose answer is a matter of discovery or experience; it is rather more akin to a matter of decision. It makes no sense to ask whether there are unanalysable subject–predicate propositions, as if this were a matter of something’s either existing or not existing; whether there are unanalysable subject–predicate propositions depends only on whether we have introduced signs of a certain form in propositions that express a sense. A formal concept is descriptive of a way of symbolizing, and whether a symbol of a certain form exists depends on whether we have introduced one, that is, on whether we have determined rules of projection that make it possible to compare propositions in which it occurs with reality for truth or falsity.⁸

One of the consequences of Wittgenstein’s conception of formal concepts as purely descriptive of ways of symbolizing is that it directs us back to the application of ordinary language as the proper object of logical investigation. The logical forms of elementary propositions—i.e. of contentful propositions that represent possible states of affairs—cannot be determined independently of an investigation of the symbolism in which we express propositions with sense. We cannot say *a priori* how the symbols that we use to express propositions with sense symbolize:

Elementary propositions consist of names. Since, however, we are unable to give the number of names with different meanings, we are also unable to give the composition of elementary propositions. (*TLP* 5.55)

We cannot say *a priori* what senses are expressed in propositions or how our signs symbolize. This is something that the use of language makes manifest, and it isn’t something that can be determined independently of an investigation of the use of language in propositions with sense. When it comes to

⁸ This contrasts with Geach’s interpretation of the say/show distinction. Geach writes: ‘Wittgenstein holds that various features of reality come out . . . in our language, but we cannot use this language to *say*, assert, that reality has these features’ (Geach, 1976, p.54). On Geach’s interpretation there are features that reality has independently of its representation in language, which are shown in the logical syntax of language, but which cannot be expressed in propositions. On the interpretation given here, logical syntax concerns how the expressions of our language symbolize; the question whether these modes of symbolizing are correct or incorrect, fit or do not fit reality, makes no sense. However, insofar as the logical order of our system of representation is preserved in the states of affairs that are represented, we can ‘in a certain sense . . . talk about the formal properties of objects and states of affairs’ (*TLP* 4.122). Thus, these formal properties are essentially mirrored in the way the expressions of our language signify and can be made clear through the logical investigation of language.

the logical forms of the constituents of elementary propositions—i.e. of the indefinables of our language—there is nothing that determines a priori what they must be; it is only by looking at the use of language—i.e. at its application—that we can determine what forms of elementary propositions there are. What forms of elementary propositions there are is, therefore, in a certain sense arbitrary: there is nothing that dictates whether a sign of a certain form can be given a sense. Thus:

Logical forms are *without* number.

Hence there are no pre-eminent numbers in logic, and hence there is no possibility of philosophical monism or dualism, etc. (*TLP* 4.128)

It is only when the task of analysis has been carried out and the sense of a proposition perspicuously expressed that we shall be able to say what the logical forms of elementary propositions are, that is, whether there are subject–predicate, or dual-relation propositions. However, Wittgenstein believes that some things can be settled a priori: ‘Clearly we have some concept of elementary propositions quite apart from their particular logical forms’ (*TLP* 5.555). The concept of elementary propositions that we have constitutes everything that is essential to the notion of a logical picture, that is, everything that belongs to the nature of a proposition that represents a possible state of affairs. Thus:

Even if the world is infinitely complex, so that every fact consists of infinitely many states of affairs and every state of affairs is composed of infinitely many objects, there would still have to be objects and states of affairs. (*TLP* 4.2211)

What this amounts to is the following. If there is a system of representation within which we picture facts to ourselves, then there must be propositions that represent states of affairs that either exist or fail to exist. A proposition represents a possible state of affairs only by being a logical portrayal of it. The articulation that is essential to logical portrayal means that the representation of a state of affairs already includes the correlation of the logical constituents of the proposition with the constituents of the state of affairs it represents. Thus, Wittgenstein believes, we know on purely logical grounds that there must be elementary propositions and that they represent states of affairs that have simple objects as their constituents. It is only what can be settled a priori—‘without more ado’ (*TLP* 5.551)—that belongs to logic of representation as such, that is, that is common to any system within which states of affairs, of whatever kind, are represented.

Wittgenstein's concern with the nature of a proposition is essentially a concern with logic insofar as it is the essence of all representation as such, that is, insofar as it constitutes what is common to all systems of representation that stand in a projective relation to the world. He is not concerned with how individual symbols symbolize, but with what is common to all systems within which we can construct representations of states of affairs. We cannot describe the logical forms of symbols (i.e. of expressions that contribute to the sense of elementary propositions) in advance, but we can determine in advance that which makes it possible for us to compare any picture with reality. Logic is concerned only with systems of representation that stand in a projective relation to the world: 'Logic is interested only in reality. And thus in sentences ONLY in so far as they are *pictures* of reality' (*NB*, p.9). Logic does not deal with what is arbitrary in our language—it does not determine the forms of elementary propositions—but with what holds for any signs insofar as they are projected onto reality. We cannot anticipate a priori the forms of the propositions that constitute the content of a system of representation. But insofar as logic is the essence of all description, it is what can be determined independently of the content of elementary propositions. Logic is a priori insofar as it is essential to the representation of states of affairs as such.

One of Wittgenstein's central aims is to show that the propositions of logic have a unique status against all other propositions. Logic is concerned with what is essential before any proposition can be compared with reality for truth or falsity. What is essential before any proposition can be compared with reality cannot itself be something that is true or false. Thus, the task of making perspicuous the distinction between the propositions of logic and general truths about the world is, for Wittgenstein, equivalent to the task of showing that logic does not represent. In this chapter, we've seen Wittgenstein try to make clear that a variable does not represent and that what is expressed by a variable cannot be represented. What is presented by a variable—the logico-syntactic properties of a class of symbols—is that in virtue of which a symbol represents what it does, and what it presents is therefore prior to truth or falsity. Wittgenstein's investigation of the role of variables and the nature of formal concepts is the first step in his attempt to make the status of logic perspicuous. In the next three chapters, we'll see how Wittgenstein completes the task of showing that logic concerns the system within which states of affairs are represented, and does not represent. Logic takes care of itself insofar as the

whole of logic is prior to truth and already given with a system in which states of affairs are represented. All that remains to be done is to show how the whole of logic is given with the logic of depiction, that is, that in understanding how a proposition expresses its sense we have already got everything we need to make the status of logic perspicuous.

Molecular Propositions

1. The general theme of Wittgenstein's objections to both Russell's theory of judgement and Frege's treatment of truth and falsity is that the sense of a proposition precludes the assimilation of propositions to names. A name does not have a sense (i.e. true–false poles), and what has a sense cannot be treated as a name, or as a set of names. Thus, the problem of understanding how a proposition expresses its sense is seen to be inextricably linked with the problem of understanding how one proposition occurs in another: 'a proposition cannot have to another *the* internal relation which a *name* has to a proposition of which it is a constituent' (NDM, p.115). Wittgenstein's remarks on what he sees as the deficiencies of Frege and Russell's view of the logical constants repeatedly focus on the problems that arise if the logical constants are held to be genuine functions and relations, and propositions are thereby treated as *relata*. For Wittgenstein, the logical constants cannot 'be predicates or relations, because propositions, owing to sense, cannot have predicates or relations' (NL, p.101). The problems that arise for Frege's and Russell's philosophical logic will disappear, he believes, only when we recognize that the logical constants do not make any substantive contribution to the sense of propositions. In other words, we must come to see that the content of a molecular proposition is nothing over and above the content of its atoms:

Molecular propositions contain nothing beyond what is contained in their atoms; they add no material information above that contained in the atoms. (NL, p.98)

Wittgenstein's diagnosis of the problems that arise in connection with Frege and Russell's treatment of propositions and the logical constants leads him to the view that it is only an understanding that starts from the sense—i.e. the bipolarity—of propositions that will escape the confusions that Frege's and Russell's accounts create. We must, he believes, begin by making clear how a proposition expresses its sense. In Chapter 5, we saw how Wittgenstein achieves his aim of clarifying the nature of a proposition.

His investigation of the essence of logical portrayal is intended to make clear what Frege and Russell left fatally obscure, namely the logical distinction between a proposition and a name. Once we recognize that a proposition is essentially a logically articulate symbol within a system of representation that stands in a projective relation to the world, then we can see clearly how a proposition expresses its sense, that is, has true–false poles. The result of the investigation is that we can now see clearly the logical distinction between propositions, and names and functions. What Wittgenstein has to do now is to show that the clarification of the essence of logical portrayal also serves to make perspicuous the relation between a molecular proposition and its atoms. He must show that in making clear how a proposition expresses its sense he has also implicitly made clear that ‘molecular propositions contain nothing beyond what is contained in their atoms.’ It is not, of course, that he needs to deduce the relation between molecular propositions and their atoms from the essence of logical portrayal, but that the essence of logical portrayal must already contain everything that is need to make the relation perspicuous.

2. At *TLP* 4.2, Wittgenstein returns to the question how a proposition expresses its sense. The sense of a proposition is given by a rule that determines the circumstances in which it is true or false:

The sense of a proposition is its agreement and disagreement with possibilities of existence and non-existence of states of affairs.

Wittgenstein now goes on to clarify the relation between molecular propositions and the propositions that are their atoms. He first of all introduces the term ‘elementary proposition’ to describe the simplest kind of proposition, namely a proposition that does not contain other propositions as its atoms:

The simplest kind of proposition, an elementary proposition, asserts the existence of a state of affairs. (*TLP* 4.21)

An elementary proposition is the simplest picturing symbol. It does not contain any logical constants, but consists only of names (primitive expressions) in combination with one another. An elementary proposition asserts the existence of a state of affairs. If an elementary proposition is true, the state of affairs exists; if it is false, the state of affairs does not exist. In order to determine whether an elementary proposition is true or false, we must compare it with reality.

Wittgenstein now goes on to repeat the claim that elementary propositions are logically independent of one another:

It is a sign of an elementary proposition's being elementary that there can be no elementary proposition contradicting it. (*TLP* 4.211)

The claim that elementary propositions are logically independent of one another is, of course, untenable. In a conversation with members of the Vienna Circle in 1930, Wittgenstein stands by his conception of elementary propositions as propositions that represent 'without any help from logical constants', but acknowledges that his commitment to the logical independence of elementary propositions 'was completely wrong' (*WVC*, pp.73–4). The assumption of the logical independence of elementary propositions is, however, essential to Wittgenstein's commitment to the idea of propositional logic as the pure a priori essence of all representation as such. That is to say, it is essential to the idea that all systems of representation share a logical structure that is independent of the content of elementary propositions. It is, as we shall see, this assumption that makes it possible for Wittgenstein to present a description of the propositions of any sign-language—the general propositional form—in the form of a variable that expresses the general form of a truth-function.

We cannot tell a priori what elementary propositions there are, or what their logical form will be. However, the investigation of how a proposition expresses its sense has made it clear that an elementary proposition is essentially articulate; it is essentially a combination of elements. Thus, we do know a priori that an elementary proposition is a combination of simple expressions:

An elementary proposition consists of names. It is a nexus, a concatenation, of names. (*TLP* 4.22)

We know on purely logical grounds that there must be elementary propositions—i.e. propositions that do not have other propositions as atoms—and that they must have simple signs as their logical constituents:

It is obvious that the analysis of propositions must bring us to elementary propositions which consist of names in immediate combination. (*TLP* 4.221)

Wittgenstein goes on:

This raises the question how such combination into propositions comes about. (*TLP* 4.221)

This is the same question as the question how a proposition expresses its sense. What we have now come to see clearly is that the combination of names in a proposition with sense comes about insofar as it belongs to the essence of a name that it occurs in propositions. Thus, a name does not get its meaning

directly—i.e. by means of a direct link between a sign and a transcendent object—and *then* occur in propositions with sense. Rather, the meaning of a logically simple sign is fixed by its role in a system of representation that stands in a projective relation to the world, that is, by the contribution that it makes to determining the position of each of the members of a class of propositions in logical space: ‘only in the nexus of a proposition does a name have meaning’ (*TLP* 3.3). Now that he has introduced the concept of an elementary proposition, Wittgenstein believes he is in a position to give this idea a more precise expression. The propositions whose sense is determined by the combination of simple signs constitute all the elementary propositions. Given the assumption that a name is essentially a constituent of propositions—i.e. of a symbol that expresses a sense—the converse also holds: the meaning of a logically simple sign is determined by its role in elementary propositions, that is, in propositions that do not contain any logical constants. Thus:

It is only in the nexus of an elementary proposition that a name occurs in a proposition. (*TLP* 4.23)

It is clear from this that Wittgenstein believes that the idea of logical portrayal, which he has used to clarify how a proposition expresses its sense, already contains the idea that all the content of language is determined at the level of elementary propositions. That is to say, it already makes clear that the content of all propositions is reducible to the content of elementary propositions.

3. Although Wittgenstein has given no examples of elementary propositions or of the names that occur in them, he now goes on to make the following stipulation:

Names are the simple symbols: I indicate them by single letters (‘*x*’, ‘*y*’, ‘*z*’)

I write elementary propositions as functions of names, so that they have the form ‘ $\mathcal{f}x$ ’, ‘ $\varphi(x, y)$ ’, etc.

Or I indicate them by the letters ‘*p*’, ‘*q*’, ‘*r*’. (*TLP* 4.24)

The status of the letters that Wittgenstein introduces here is clearly problematic. They are apparently introduced as schematic letters intended to indicate certain sorts of symbol, namely elementary propositions and their logical constituents. However, Wittgenstein has just acknowledged that the logical form of elementary propositions is not something that can be anticipated a priori. This clearly raises a question: how does he know that ‘ $\mathcal{f}x$ ’ and ‘ $\varphi(x, y)$ ’ represent the forms of elementary propositions. As we saw in the previous chapter, a variable is introduced by replacing a symbol in a proposition with sense.

Yet we have no examples of elementary propositions or their constituents. It seems, therefore, that we are being asked to accept the schematic letters that indicate the forms of elementary propositions and their logical constituents as standing in, for the moment, for something that can only be legitimately or intelligibly introduced *after* the work of analysis is carried out. On Wittgenstein's conception of the relation between logical forms and propositions with sense, the letters that he introduced at *TLP* 4.24 are strictly non-sensical: they have not been introduced via the symbols that they are intended to characterize.¹

However, we do know a priori, he believes, that the propositions that are the end point of analysis must consist of simple, indefinable names of the form '*a*', '*b*', '*c*', and so on combined with indefinable functions of these: '*Fx*', '*xRy*', and the like. To that extent, Wittgenstein may have regarded the schematic letters that he introduces in *TLP* 4.24 as a legitimate anticipation of what analysis must reveal. Against this, there is evidence to suggest that he believed that the forms of elementary propositions might be quite unlike the superficial forms of the unanalysed propositions of ordinary language. In a conversation with members of the Vienna Circle in 1929, he remarks:

Now I think that there is one principle governing the whole domain of elementary propositions, and this principle states that one cannot foresee the form of elementary propositions. It is just ridiculous to think that we could make do with the ordinary structure of our everyday language, with subject–predicate, with dual relation, and so forth. (*WVC*, p.42)

However, there is a question whether this is the view he held at the time of writing the *Tractatus*. The above remark continues with the observation that real numbers must occur in elementary propositions, and Wittgenstein suggests that 'this fact alone proves how completely different elementary propositions can be from all other propositions.'² Since this is a position he adopted in

¹ It might be taken as an objection to the view of names and objects advocated in Chapter 5 that, in *TLP* 4.24, Wittgenstein seems to suggest that only expressions that are given by means of single letters ('*x*', '*y*', '*z*') are names or simple symbols. Shouldn't he, on the view I've defended, include signs for functions as names? The only way out of the difficulty is to allow that Wittgenstein's use of the term 'name' is shifting and that here he uses 'name' to mean Fregean name. *TLP* 4.24 is not, in any case, enough to justify the alternative interpretation, on which '*aRb*' consists of two, rather than three, names, and the role of '*xRy*' is to put these names in relation to one another and thereby combine them in a proposition. For *TLP* 4.24 also allows for elementary propositions of the form, '*fx*', which, on that way of counting does not consist of names standing in relation to one another.

explicit criticism of his views in the *Tractatus*, it is clear that the above remark cannot be taken simply as an expression of a view that he has always held.

Moreover, there are remarks in the *Notebooks* that suggest that he had earlier held the opposite view:

My difficulty surely consists in this: In all the propositions that occur to me there occur names, which, however, must disappear on further analysis. I know that such a further analysis is possible, but am unable to carry it out completely. In spite of this I certainly seem to know that if the analysis were completely carried out, its result would have to be a proposition which once more contained names, relations, etc. In brief it looks as if in this way I knew a form without being acquainted with any single example of it. (*NB*, p.61)

He seems to express the same idea at *TLP* 5.47:

Wherever there is compositeness, argument and function are present.

However, even supposing that he did believe, at the time of writing the *Tractatus*, that the forms of elementary propositions would duplicate the structure of the propositions of ordinary language, it is clear that everything he has said in the *Tractatus* about the introduction of variables makes that view problematic. For it seems that Wittgenstein's central point in the remarks on variables and formal concepts is that there is no way of introducing, or being acquainted with, a form other than via the symbols that are its values. This suggests that, in the absence of any examples of elementary propositions and their constituents, he is not in a position to introduce variables that present them.

4. Propositions that have simple signs as their constituents are elementary propositions; simple signs occur only as constituents of elementary propositions. A state of affairs is possible insofar as there is an elementary proposition that represents it; every possible state of affairs is represented by means of an elementary proposition. Thus, if we know which elementary propositions are true, then we know everything that is the case:

If all the true elementary propositions are given, the result is a complete description of the world. The world is completely described by giving all elementary propositions, and adding which of them are true and which false. (*TLP* 4.26)

That is to say, a complete description of the world—of all that is the case—is given by means of all the true elementary propositions. All the existing states of affairs can be represented by means of true elementary propositions. The world can be completely characterized by the ascription of truth-values to the

totality of elementary propositions; if we know all the true elementary propositions, then we know all the facts.

The totality of elementary propositions constitutes logical space, that is, the space of possibilities of existence and non-existence of states of affairs. For any subset of the totality of elementary propositions, there will be a determinate number of possibilities for the distribution of truth-values across the members of the set. The truth-possibilities for the members of a set of elementary propositions correspond to the possibilities for the existence and non-existence of the states of affairs they represent. Thus:

Truth-possibilities of elementary propositions mean possibilities of existence and non-existence of states of affairs. (*TLP* 4.3)

On the assumption that elementary propositions are logically independent of one another, the possibilities for existence and non-existence of states of affairs can be calculated as follows:

For n states of affairs, there are $K_n = \sum_{\nu=0}^n \binom{n}{\nu}$ possibilities of existence and non-existence (*TLP* 4.27)

The formula Wittgenstein gives is equivalent to the formula $K_n = 2^n$. Wittgenstein goes on to specify:

Of these states of affairs any combination can exist and the remainder not exist. (*TLP* 4.27)

That is to say, no combination of possibilities of existence and non-existence is ruled out a priori: the existence of the state of affairs represented by one elementary proposition in the set is logically independent of the existence and non-existence of the state of affairs represented by any other member of the set. Once again, this assumption expresses Wittgenstein's commitment to the idea that there is an essence of representation as such, that is, to the idea that there is a logical structure that is shared by all systems of representation and which is independent of the content of elementary propositions.

The truth-possibilities of elementary propositions can be represented by means of schemata in which the possible distributions of truth-values are presented by rows of T 's and F 's. Wittgenstein gives the schemata for $n = 1$, $n = 2$, and $n = 3$ as follows:

We can represent truth-possibilities by schemata of the following kind (' T ' means 'true', ' F ' means 'false', the rows of ' T 's' and ' F 's' under the row of elementary propositions symbolize their truth-possibilities in a way that can be easily understood):

p	q	r	p	q	p
T	T	T	T	T	T
F	T	T	F	T	F
T	F	T	T	F	
T	T	F	F	F	
F	F	T			
F	T	F			
T	F	F			
F	F	F			

(TLP 4.31)

Each row of a schema represents a possible combination of truth-values. Wittgenstein now specifies the essence of a proposition as follows:

A proposition is an expression of agreement and disagreement with the truth-possibilities of elementary propositions. (TLP 4.4)

Thus, the content of all propositions is exhausted by the possibilities for agreement and disagreement with the truth-possibilities of elementary propositions:

Truth-possibilities of elementary propositions are the conditions of the truth and falsity of propositions. (TLP 4.41)

Wittgenstein goes on:

It immediately strikes one as probable that the introduction of elementary propositions provides the basis for understanding all other kinds of proposition. Indeed the understanding of general propositions *palpably* depends on the understanding of elementary propositions. (TLP 4.411)

All portrayal—including, as we shall see in Chapter 10, portrayal in general propositions—takes place by means of elementary propositions. All the content that is expressed by propositions is expressed by elementary propositions.

5. A proposition is an expression of agreement and disagreement with the truth-possibilities of elementary propositions. Wittgenstein gives the following formula for determining the number of ways in which a proposition can agree or disagree with the truth-possibilities of a set of elementary propositions:

For n elementary propositions there are $\sum_{k=0}^{k_n} \binom{K_n}{k} = L_n$ ways in which a proposition can agree and disagree with their truth-possibilities. (TLP 4.42)

The formula is equivalent to $L_n = 2^{(2^n)}$ Thus, given one elementary proposition there are four possibilities for agreement and disagreement with its truth-possibilities: a proposition that is true if p is true and true if p is false ($p \vee \neg p$); a

proposition that is true if p is true and false if p is false (p); a proposition that is false if p is true and true if p is false ($\neg p$); and a proposition that is false if p is true and false if p is false ($p \& \neg p$). Thus, the truth-conditions of all propositions can be expressed by means of schemata that correlate the mark ‘ T ’ with the truth-possibilities of elementary propositions:

The sign that results from correlating the mark ‘ T ’ with truth-possibilities is a propositional sign. (*TLP* 4.44)

Thus, a proposition that contains two elementary propositions, p and q , as atoms and which is false if p is true and q is false and true in all other circumstances, can be written as follows:

$$\begin{array}{l} p \ q \\ T \ T \ T \\ F \ T \ T \\ T \ F \ F \\ F \ F \ T \end{array}$$

If we always write the truth-possibilities for p and q in the same order, the last column is enough on its own to express the propositions. If we write the column as a row, then the above propositional sign now becomes:

$$(TTFT)(p, q)$$

All the content of the complex proposition is expressed by means of the signs ‘ p ’ and ‘ q ’; the ‘ T ’s and ‘ F ’s that occur in the left-hand bracket do not themselves play a signifying role. That is to say, the ‘ T ’s and ‘ F ’s have nothing corresponding to them. The role of the left-hand bracket is to give a rule for determining the sense—i.e. the truth-conditions—of the complex proposition, which has p and q as its atoms, on the basis of the sense of p and q . Thus:

It is clear that a complex of the signs ‘ F ’ and ‘ T ’ has no object (or complex of objects) corresponding to it, just as there is none corresponding to the horizontal or vertical lines or to the brackets. — There are no ‘logical objects’.

Of course the same applies to all signs that express what the schemata of ‘ T ’s’ and ‘ F ’s’ express. (*TLP* 4.441)

It applies, in other words, to the logical constants.

Thus, Wittgenstein’s clarification of the nature of logical portrayal not only enables him to make clear how an elementary proposition expresses its sense, but also to make clear that all logical portrayal takes place by means of elementary propositions, and thus that the logical constants that occur in

molecular propositions do not play a signifying role: they do not represent. Wittgenstein does not use the truth-tables in the way that Frege does, to elucidate the logical constants, which are regarded as logical primitives. Rather, the truth-tables are treated as an alternative notation—i.e. another way of symbolizing what is symbolized by the logical constants—that can be used to show something about the nature of these symbols: they are not a representing part of the symbolism.

6. We've already seen, for the case of a single elementary proposition, that the groups of truth-conditions that can be specified relative to the truth-possibilities of a set of elementary propositions can be arranged in a series. The first and last groups in the series— $(p \vee \neg p)$ and $(p \& \neg p)$, in our example—represent 'the extreme cases':

In one of the cases the proposition is true for all the truth-possibilities of elementary propositions. We say that the truth-conditions are *tautological*. In the second case the proposition is false for all truth-possibilities: the truth-conditions are *contradictory*.

In the first case we call the proposition a tautology; in the second a contradiction. (TLP 4.46)

Thus, it becomes clear that for any set of elementary propositions there are two propositions that have the members of the set as their atoms and whose truth-values remain the same whatever combination of the truth-possibilities of its atoms obtains. A proposition is an expression of agreement and disagreement with the truth-possibilities of elementary propositions. Tautologies and contradictions are arrived at by a process that mirrors the construction of any other molecular proposition from its atoms. However, in the case of tautologies and contradictions, the process results in propositions that no longer represent a situation that either exists or fails to exist. Tautologies and contradictions do not express a sense:

Propositions show what they say: tautologies and contradictions show that they say nothing.

A tautology has no truth-conditions, since it is unconditionally true; and a contradiction is true in no condition.

Tautologies and contradictions lack sense. (TLP 4.461)

The possibility of constructing propositions whose truth-conditions are either tautological or contradictory is thus seen to belong to the essence of a proposition. Given the rule for determining the truth-conditions (i.e. the sense) of a complex proposition on the basis of the truth-possibilities of its

atoms, it is already clear that there are molecular propositions that do not represent a *possible* combination of truth-possibilities of elementary propositions, but which are either true for all possible combinations or false for all possible combinations. These propositions do not determine a rule of projection that divides reality in such a way that it either agrees or disagrees with what the rule lays down. Thus, there are propositions that, ‘although they are part of the symbolism’, fail to express a sense (*TLP* 4.4611). In tautologies and contradictions the rule that determines the truth-conditions of a complex proposition on the basis of the truth-possibilities of its atoms is such that the resulting proposition either ‘leaves open to reality the whole—the infinite whole—of logical space’, or ‘fills the whole of logical space leaving no part of it for reality’ (*TLP* 4.463). Thus:

Tautologies and contradictions are not pictures of reality. They do not represent any possible situations. For the former admit *all* possible situations, and the latter *none*.

In a tautology the conditions of agreement with the world—the representational relation—cancel one another, so that it does not stand in any representational relation to reality. (*TLP* 4.462)

Wittgenstein’s investigation of how a proposition expresses its sense thus leads to the recognition that there is a possibility for constructing propositions that do not ‘determine reality in any way’ (*TLP* 4.463). It is clear that these propositions are senseless—i.e. that they do not stand in a representational relation to reality—and that their possibility is given with a language in which it is possible to express thoughts about the world. It is also clear that the relation between these propositions and elementary propositions with a sense is of the nature of a dematerialization: in tautologies and contradictions symbols occur, but they have been combined in such a way that all representational relations to reality have been cut. Wittgenstein goes on:

What corresponds to a determinate logical combination of signs is a determinate logical combination of their meanings. It is only to the uncombined signs that *absolutely any* combination corresponds.

In other words, propositions that are true for every situation cannot be combinations of signs at all, since, if they were, only determinate combinations of objects could correspond to them.

(And what is not a logical combination has *no* combination of objects corresponding to it.)

Tautology and contradiction are the limiting cases—indeed the disintegration—of the combination of signs. (*TLP* 4.446)

Tautologies and contradictions are constructed according to the same rule that determines the truth-conditions—i.e. the sense—of all other complex propositions, but in this case the result is the same as leaving the signs uncombined: nothing is represented. In propositions we ‘arrange things *experimentally* as they do *not* have to be in reality’ (*NB*, p.13), but in tautologies and contradictions nothing is arranged experimentally. The symbols that are combined in the elementary propositions that are the atoms of tautologies and contradictions contribute to the symbol as a whole in such a way that it is just as if they were not combined, for their combination plays no role in determining whether the tautology or contradiction is true or false. That is to say, the sense of the elementary propositions that are the atoms of a tautology—i.e. the circumstances in which we call it true or false—plays no role in determining the truth-condition of the molecular proposition, for they are true or false come what may. Tautologies and contradictions are part of the symbolism, but a part in which symbols no longer symbolize, that is, they no longer characterize the sense of the proposition that has been constructed by means of them. ‘It’s raining or it’s not raining’ does not express a different sense from ‘It’s snowing or it’s not snowing’; both are true in exactly the same circumstances, namely all circumstances. Although signs are combined in the elementary propositions, the meaning of the signs and the way they are combined plays no role in determining the conditions under which we call the symbol as a whole true or false. It is essential to the symbol as a whole that its atomic propositions have a sense, but this sense plays no essential role in the symbol: it does not characterize its sense.² Thus:

Admittedly the signs are still combined with one another even in tautologies and contradictions—i.e. they stand in certain relations to one another: but these relations have no meaning, they are not essential to the *symbol*. (*TLP* 4.4661)

7. At *TLP* 4.5, Wittgenstein writes:

It *now* [emphasis added] seems possible to give the most general propositional form: that is, to give a description of the propositions of *any* sign-language *whatsoever* in

² Diamond calls tautologies ‘sentence-like structures’, which, as a result of Wittgenstein’s investigation, ‘we shall not be tempted really to think of... as sentences’ (Diamond, 1988/1991a, pp.192–3). On the interpretation I’ve presented, tautologies and contradictions count as propositions, but in a degenerate sense. They are propositional signs constructed by means of the truth-operations from elementary propositions, but in such a way that the resulting proposition lacks a sense: it does not represent. Tautologies and contradictions have, therefore, a unique status among propositions. In making this unique status clear, Wittgenstein believes he succeeds in clarifying the nature and status of the propositions of logic. This topic is discussed further in Chapter 10.

such a way that every possible sense can be expressed by a symbol satisfying the description, and every symbol satisfying the description can express a sense, provided that the meanings of the names are suitably chosen.

Earlier in his discussion of the relation between elementary propositions and all other propositions, Wittgenstein described the essence of a proposition as follows:

A proposition is an expression of agreement and disagreement with truth-possibilities of elementary propositions. (*TLP* 4.4)

This characterization is unsatisfactory to the extent that it employs a formal concept—the concept of a proposition—as if it were a genuine concept. The characterization does not reflect Wittgenstein’s insight into how a formal concept is given, namely by means of a variable that ‘represents a constant form that all its values possess’ (*TLP* 4.1271). The first sentence of *TLP* 4.5 clearly suggests that Wittgenstein was not previously in a position to express the essence of a proposition in the form of a variable. What has occurred between *TLP* 4.4 and *TLP* 4.5 is that we have seen that the propositions that can be constructed from a set of elementary propositions can be presented in the form of a schema that systematically lists all the propositions that can be constructed from the members of the set as truth-functions of the latter.

Thus, for any set of elementary propositions, we can express all the propositions that can be constructed from them in a schema that systematically presents each possibility for agreement and disagreement with the truth-possibilities of the relevant elementary propositions in the form of a truth-function. Each schema will start with a tautology ($T \dots$) and end with a contradiction ($F \dots$). Given that there is no proposition that cannot be expressed as a truth-function of a set of elementary propositions, it follows that, if we are given all the elementary propositions, then we are in a position to determine all propositions that can be constructed from them. If we are given all elementary propositions, then we are also given the means to construct every proposition. The rule by which we construct all propositions out of elementary propositions expresses what all propositions have in common, and it corresponds to the general form of a proposition:

The existence of a general propositional form is proved by the fact that there cannot be a proposition whose form could not have been foreseen (i.e. constructed). (*TLP* 4.5)

Once all elementary propositions are given—i.e. once we have a language in which states of affairs can be represented—there is no proposition ‘whose form could not have been foreseen (i.e. constructed)’. Once we see this clearly, then we can also see that propositions can be described by means of a variable that expresses what all propositions have in common: the general form of a proposition.

Wittgenstein goes on:

The general form of a proposition is: This is how things stand. (*TLP* 4.5)

The symbol, ‘This is how things stand’, clearly does not represent. Its role is that of a variable: it expresses what all symbols of a certain form have in common.

The general propositional form is a variable. (*TLP* 4.53)

Every symbol that is a value of the variable is a proposition and every proposition is a value of the variable. What the variable makes clear is that the essence of a proposition is given, once and for all, with the essence of elementary propositions: the essence of a proposition is the essence of logical portrayal. This is the case insofar as *all* logical portrayal takes place via elementary propositions: if we are given all the elementary propositions, then we can construct all the other propositions as truth-functions of them. All propositions are constructed out of elementary propositions via a rule that determines their truth-conditions in relation to the truth-possibilities of the elementary propositions. The rule itself does not represent, that is to say, no representation takes place by means of it. The rule does not characterize the sense of a proposition, but rather uses the sense of elementary propositions to construct further propositions out of them. It is insofar as all propositions are constructed by means of a rule out of elementary propositions with sense that we can express the general form of a proposition as the variable: this is how things stand. This is what all propositions have in common. Thus, Wittgenstein elucidates the general form of a proposition as follows:

Suppose that I am given *all* elementary propositions: then I can simply ask what propositions I can construct out of them. And there I have *all* propositions, and *that* fixes their limit. (*TLP* 4.51)

Wittgenstein has already used the investigation of the logic of portrayal to reveal that an elementary proposition expresses a sense insofar as it belongs to a

system of representation within which the logical place of each elementary proposition is determined by its constituents and how they are combined. Every elementary proposition belongs to a system of representation that stands in a projective relation to the world; there is no elementary proposition that lies outside the logical space that it constituted by the rules of projection whereby we determine the circumstances in which each proposition in a system of representation is true or false. If a system of representation is given, then all the indefinables that are the constituents of elementary propositions are given, and thereby all elementary propositions are given. Thus:

If objects are given, then at the same time we are given *all* objects.

If elementary propositions are given, then at the same time *all* elementary propositions are given. (*TLP* 5.524)

If we can describe a spatial complex using names for spatial coordinates, then we can describe any spatial complex; if we can describe a situation in visual space using colour words, then we can describe any arrangement of colours in visual space. It is only within a system of representation that particular names have meaning or particular elementary propositions sense.

Wittgenstein has now made clear, moreover, that if all elementary propositions are given, then all propositions are given:

Propositions comprise all that follows from the totality of all elementary propositions (and, of course, from its being the *totality* of them *all*). (*TLP* 4.52)

All representation of what is the case in propositions is by means of representation of states of affairs in elementary propositions. Elementary propositions are the basis of all other propositions; given elementary propositions as a base, propositions comprise all the possible expressions of agreement and disagreement with the truth-possibilities of propositions belonging to the base. The totality of elementary propositions is given with the system of representation within which any elementary proposition is expressed. We cannot anticipate a priori what forms of elementary propositions there will be, but, given the totality of elementary propositions, we can give the rule for the construction of all further propositions out of them. Wittgenstein goes on:

(Thus, in a certain sense, it could be said that *all* propositions were generalizations of elementary propositions.) (*TLP* 4.52)

That is to say, all propositions—including general propositions and (in the limiting case) tautologies and contradictions—have elementary propositions

as their base. Every proposition that belongs to the symbolism is already given with the totality of elementary propositions, and the totality of elementary propositions is given with a system of representation that stands in a projective relation to the world.

8. At *TLP* 5–5.01, Wittgenstein characterizes the relation of propositions to elementary propositions as follows:

A proposition is a truth-function of elementary propositions.

(An elementary proposition is a truth-function of itself.)

Elementary propositions are the truth-arguments of propositions.

He then goes on in the next paragraph, *TLP* 5.02, to criticize Frege's view of the propositions of logic:

The arguments of functions are readily confused with the affixes of names. For both arguments and affixes enable me to recognize the meaning of the signs contained in them.

For example, when Russell writes '+_c' the '_c' is an affix which indicates that the sign as a whole is the addition-sign for cardinal numbers. But the use of this sign is the result of arbitrary convention and it would be quite possible to choose a simple sign instead of '+_c'; in '-*p*', however, '*p*' is not an affix but an argument: the sense of '-*p*' cannot be understood unless the sense of '*p*' has been understood already. (In the name Julius Caesar 'Julius' is an affix. An affix is always part of a description of the object to whose name we attach it: e.g. *the* Caesar of the Julian gens.)

If I am not mistaken, Frege's theory about the meaning of propositions and functions is based on the confusion between an argument and an affix. Frege regarded the propositions of logic as names, and their arguments as the affixes of those names.

The passage is very obscure. Part of its obscurity arises from Wittgenstein's uncharacteristic use, in the second paragraph of the remark, of the expressions 'argument' and 'function' in connection with propositions. On the face of it this goes counter to the fundamental commitment to the idea that the logical constants cannot be functions and that propositions, owing to sense, cannot be arguments. We can avoid the sense of profound inconsistency, however, if we understand Wittgenstein's use of these expressions as related to their use in the remarks that precede *TLP* 5.02, to which it is clearly related. Thus, we should read 'function' and 'argument', in the context, as equivalent to 'truth-function' and 'truth-argument'. In that case, the point of the second paragraph is that $\neg p$ is not, as Frege held, a complex name, but a truth-function of its truth-argument, p ; that is to say, $\neg p$ is a truth-function of the sense of p . We can see this insofar as the sense of $\neg p$, and thus its truth-value,

is determined by means of the sense of p , and cannot be grasped independently of it. Thus, while ‘ $+_c$ ’ could be replaced by a simple sign, $\neg p$ cannot be replaced by an expression that does not include an expression that expresses the sense of p : negation is an operation on the sense of p , the result of which is a (truth-)function of the sense of p . However, this is not the only difficult aspect of the remark. For the final paragraph makes clear that Wittgenstein is not concerned with a general criticism of Frege’s treatment of propositions as complex names, but with a quite specific worry about how this affects his treatment of the propositions of logic.

In order to understand the significance of Wittgenstein’s criticism of Frege, in the final paragraph of *TLP* 5.02, we need to consider it in the light of the distinction that Wittgenstein’s investigation of logical construction of complex propositions out of elementary propositions has revealed. Although he has not yet taken the step of identifying the propositions of logic with all the tautologies, it is already clear that, in the limiting case of tautologies and contradictions, the proposition that is constructed from elementary propositions with sense itself lacks a sense, that is, it lacks the essence of a proposition. Thus, we can already see that there are propositions that are part of the symbolism, but which have ‘a unique position as against all other propositions’ (NL, p.107). The difficulty with Frege’s treatment of propositions as complex names is that it completely obscures this distinction. If we treat propositions as complex names, then the propositions of logic are not distinguished from propositions with sense: they are all alike names of truth-values. It is only when we start from the sense of an elementary proposition—i.e. from its bipolarity—that we can recognize how elementary propositions occur in molecular propositions. And it is only when we see this clearly that the distinction between propositions which express a sense and propositions in which all representational relations with reality have been cut becomes perspicuous.

9. Thus, in showing that all representation of the world takes place through the representation of possible states of affairs in elementary propositions, Wittgenstein has begun to clarify both how one proposition occurs in another, and the nature and status of so-called logical truths. He has used his clarified understanding of the nature of logical portrayal to show that one proposition does not occur in another in the same way in which a name occurs in a proposition of which it is a constituent. That is to say, a molecular proposition does not have any content over and above what is contained in its atoms.

One proposition occurs in another insofar as it is a truth-argument of it, that is, insofar as it belongs to the class of elementary propositions against whose truth-possibilities the truth-conditions of the proposition are fixed. A proposition is either an elementary proposition or a truth-function of elementary propositions. Insofar as an elementary proposition can be considered a truth-function of itself, all propositions are truth-functions of elementary propositions. Tautologies are seen to be the limiting case of a proposition: they are constructed in such a way that the meaning of the signs that occur in them play no role in determining whether they are true or false. Thus, Wittgenstein is able both to describe what all propositions have in common and to show that there are propositions that have a unique status over and against propositions with sense. The fundamental aim of all this is to make it perspicuous that neither the logical constants nor the propositions of logic (i.e. all the tautologies) represent. In the next chapter, we'll see how Wittgenstein goes on to deepen and develop these ideas.

9

Inference and Operations

1. One of Wittgenstein's criticisms of Frege and Russell's universalist conception of logic is that it conceives the task of logic to be one of setting out the substantive laws that justify our moving from one proposition that is accepted as true to another. A valid deduction is, on this view, one that is made in accordance with the laws of logic. As we saw at the end of Chapter 3, we can understand this as follows: an inference from a set of propositions, p and q , to another proposition, r , is justified if r can be derived by logical rules of inference from p and q together with one or more laws of logic. Thus, what justifies a valid inference is something that is made perspicuous by rewriting the argument in a form that includes the relevant logical laws among the premises and shows that the conclusion can be derived from the premises by means of a logical rule of inference. For example, the inference from (1) and (2) to (3) in the following argument,

- (1) all whales are mammals,
- (2) all mammals are vertebrates,
- (3) therefore, all whales are vertebrates,

is logically justified insofar as given (1) and (2) together with the logical law, $((\forall x)(Fx \rightarrow Gx) \ \& \ (\forall x)(Gx \rightarrow Hx)) \rightarrow (\forall x)(Fx \rightarrow Hx)$, we can derive (3) using modus ponens. Thus, what justifies the inference from (1) and (2) to (3) is made perspicuous when we rewrite the argument as follows:

- (1') $((\forall x)(x \text{ is a whale} \rightarrow x \text{ is a mammal}) \ \& \ (\forall x)(x \text{ is a mammal} \rightarrow x \text{ is a vertebrate})) \rightarrow (\forall x)(x \text{ is a whale} \rightarrow x \text{ is a vertebrate})$ (substitution instance of the logical law $((\forall x)(Fx \rightarrow Gx) \ \& \ (\forall x)(Gx \rightarrow Hx)) \rightarrow (\forall x)(Fx \rightarrow Hx)$)
- (2') $(\forall x)(x \text{ is a whale} \rightarrow x \text{ is a mammal}) \ \& \ (\forall x)(x \text{ is a mammal} \rightarrow x \text{ is a vertebrate})$ (premises (1) and (2))
- (3') Therefore, $(\forall x)(x \text{ is a whale} \rightarrow x \text{ is a vertebrate})$ (modus ponens, (1'), (2'))

Wittgenstein's objection to the idea that the validity of an inference, such as that represented in (1)–(3), is grounded in 'laws of inference' is first expressed in 'Notes on Logic' as follows:

Logical inferences can, it is true, be made in accordance with Frege's or Russell's laws of deduction, but this cannot justify the inference; and therefore they are not primitive propositions of logic. If p follows from q , it can also be inferred from q , and the "manner of deduction" is indifferent. (NL, p.100)

We can, of course, rewrite the proof given in (1)–(3) in the form (1')–(3'). However, Wittgenstein argues, it is not because of this that the inference from (1) and (2) to (3) is justified. The inference from (1) and (2) to (3) is justified, he suggests, by the relation that these propositions bear to one another, and does not depend on anything outside them. The inference from (1') and (2') to (3') is just another way of expressing the argument represented in (1)–(3); it is not a justification of it. This shows, Wittgenstein believes, that Russell misrepresents the status of his laws of inference. Russell takes his 'laws of inference' to be maximally general truths that characterize the relation of one proposition to another. A deduction from one proposition to another is valid insofar as it is covered by these general laws. The general laws are substantive truths that constitute the primitive propositions of logic together with all the laws that can be derived from these by logical rules of inference. Given, however, that the inference from (1) and (2) to (3) is justified by the relation that these propositions bear to one another, Wittgenstein believes that this conception of the laws of inference must be mistaken: the 'laws of inference' play no essential role in justifying the transition from (1) and (2) to (3). Including a substitution instance of the relevant logical law as a premise in the argument adds absolutely nothing to our deduction of (3) from (1) and (2).

2. Wittgenstein turns his attention to the question of the nature of inference at *TLP* 5.1. His aim is to show that the clarification of the nature of a proposition that he has achieved makes it clear that there is no need to ground the transition from one proposition to another in general 'laws of inference'. Thus, his clarified understanding of the nature of logical portrayal, and of the relation between elementary propositions and molecular propositions, puts him in a position to make clear that an inference is justified by the internal relation that the propositions involved bear to one another, and does not depend on the existence of a law that connects them. His logical investigation has revealed that elementary propositions are the basis of all other propositions, that is, that all propositions are expressions of agreement

and disagreement with the truth-possibilities of elementary propositions. This now permits him to make perspicuous the internal relation between propositions that justifies the inference from one proposition to another. The problem with the argument represented by (1)–(3), Wittgenstein believes, is that our ordinary mode of signifying does not make the internal relation between the propositions clear, and thus does not make clear that the propositions themselves provide the justification for the inference from (1) and (2) to (3). Wittgenstein's investigation of the nature of a proposition allows him to use the truth-tables as a perspicuous way of expressing propositions, that is, a way that makes the inner connection between them obvious. Once we have a mode of signifying that makes the internal relation between propositions perspicuous, then the problem of justifying an inference from one proposition to another, which leads Frege and Russell to appeal to substantive 'laws of inference', will have completely disappeared.

A proposition is an expression of agreement and disagreement with the truth-possibilities of elementary propositions. Given a set of elementary propositions, there is a determinate number of ways in which a proposition can agree or disagree with the truth-possibilities of the members of the set. For n elementary propositions, there will be $2^{(2^n)}$ ways in which a proposition can agree and disagree with their truth-possibilities. Thus, given two elementary propositions as base, there are $2^{(2^2)}$ —i.e. 16—ways that a proposition can agree or disagree with their truth-possibilities. At *TLP* 5.101, Wittgenstein points out that the truth-functions of a given number of elementary propositions can be arranged in a series and set out in a schema that presents them as an ordered list. The list begins with a tautology (e.g. $(TTTT)(p, q)$) and ends with a contradiction (e.g. $(FFFF)(p, q)$); all the truth-functions between these two extremes express propositions with true–false poles. The truth-arguments of a truth-function are the elementary propositions that constitute its atoms. Wittgenstein introduces the term 'truth-ground' (*TLP* 5.101) to describe those truth-possibilities of its truth-arguments that make a proposition true. Thus, the truth-grounds of a proposition that has two propositions, p and q , as truth-arguments are all the rows of the truth-table that have a T in the final column. Wittgenstein now defines the relation of logical entailment between propositions as follows:

If all the truth-grounds that are common to a number of propositions are at the same time truth-grounds of a certain proposition, then we say that the truth of that proposition follows from the truth of the others. (*TLP* 5.11)

For example, consider the propositions $p \rightarrow q$, p , and q . The truth-tables for the first two propositions are as follows:

$p \rightarrow q :$	$p q$	
	$T T T$	
	$F T T$	
	$T F F$	
	$F F T$	(or $(TTFT)(p, q)$)

p	$p q$	
	$T T T$	
	$F T F$	
	$T F T$	
	$F F F$	(or $(TFTF)(p, q)$)

The truth-table for q is as follows:

q	$p q$	
	$T T T$	
	$F T T$	
	$T F F$	
	$F F F$	(or $(TTFF)(p, q)$)

It is now transparent that the only row of the truth-table on which *both* of the first two propositions are true is the first row, and that this is a row on which q is also true. Thus, in using the truth-table as a symbol for a proposition, Wittgenstein is able to make perspicuous that every truth-ground which is a truth-ground of both of the first two propositions is also a truth-ground of the third. We are justified in inferring the proposition q from the proposition $p \rightarrow q$ and p insofar as the truth-grounds which are common to the latter are also truth-grounds of the former. Thus:

In particular, the truth of a proposition ' p ' follows from the truth of another proposition ' q ' if all the truth-grounds of the latter are truth-grounds of the former.

The truth-grounds of the one are contained in those of the other: p follows from q . (*TLP* 5.12–5.121)

3. Wittgenstein objects to Frege and Russell's suggestion that a valid inference is one that is made in accordance with laws of deduction, that is, in accordance with laws that express the relations that hold between the logical indefinables $-$, \rightarrow , $\&$, v , and so on, and thus connect the form of one proposition with that of another. Wittgenstein has tried to show that appeal to such laws is completely unnecessary. The truth-table notation enables him to

make clear that if p follows from q , then it is because p is already contained in q , and thus the truth of p is already affirmed if the truth of q is affirmed. If we think of the assertion of a proposition as a determination of what obtains in a region of logical space, then Wittgenstein's idea is that the determination of logical space that is made in affirming q already includes the determination of the region of logical space that contains all of the propositions entailed by q . If p is one of the propositions entailed by q , then we are doing nothing more in moving from an assertion of q to an assertion of p than making explicit what has already been affirmed implicitly. Thus, the move from p to q is justified by the internal relation that these propositions bear to one another, and does not depend upon a law that connects them. A valid inference from q to p , as Wittgenstein sees it, is a matter of p 's being contained in (i.e. occupying part of the same logical space as) q , and does not depend upon a law that links p to q .

On this view, inference does not depend upon the meaning of logical indefinables, but is entirely a matter of the relation between the truth-grounds (i.e. the senses) of propositions:

If p follows from q , the sense of ' p ' is contained in the sense of ' q '. (*TLP* 5.122)

Thus, it follows from Wittgenstein's treatment of inference that anything that is logically entailed by a proposition is already contained in it as part of its sense. To entertain a proposition is to entertain everything that is entailed by it; the thought of what it entails is intrinsic to the thought of the proposition. The psychologism implicit in this conception of inference is clearly aligned with that implicit in Wittgenstein's idea that a thought already contains everything that analysis of propositions reveals. He is quite generally committed to the view that, behind our use of the sentences of ordinary language to express propositions, there lies a system of logically structured thoughts that are a complete, clear, and explicit representation of everything that a thought entails, that is, to the idea of 'a pure intermediary between the propositional *signs* and the facts'. Wittgenstein makes the point obliquely as follows:

If a god creates a world in which certain propositions are true, then by that very act he also creates a world in which all the propositions that follow from them come true. And similarly he could not create a world in which the proposition ' p ' was true without creating all its objects. (*TLP* 5.123)

He goes on:

A proposition affirms every proposition that follows from it. (*TLP* 5.124)

Thus, to affirm, or entertain, a proposition is, *by that very act*, to affirm, or entertain, every proposition that follows from it; it is also to think of all the objects that are the logical constituents of it.

A proposition expresses a sense insofar as it determines a place in logical space. Thus, when Wittgenstein says that “ $p \cdot q$ ” is one of the propositions that affirm “ p ” and at the same time one of the propositions that affirm “ q ” (*TLP* 5.1241), what this amounts to is that we are already affirming ‘ p ’ and ‘ q ’ in the determination of logical space that is made in affirming ‘ $p \& q$ ’: the truth-grounds of ‘ $p \& q$ ’ are also the truth-grounds of p and the truth-grounds of q . Wittgenstein goes on:

Two propositions are opposed to one another if there is no proposition with a sense, that affirms them both.

Every proposition that contradicts another negates it. (*TLP* 5.1241)

This is equivalent to the claim that every proposition whose truth excludes the truth of p is a negation of p . And this in turn is equivalent to the claim that elementary propositions are independent of one another. Thus, if ‘ a is red’ excludes ‘ a is green’, then there must be an analysis of these propositions that shows that ‘ a is red’ contains a proposition that is the negation of a proposition affirmed by ‘ a is green’, or vice versa. The structure of logical space that justifies an inference from one proposition to another is independent of the content of elementary propositions. Thus:

When the truth of one proposition follows from the truth of others, we can see this from the structure of the propositions. (*TLP* 5.13)

Wittgenstein goes on:

If the truth of one proposition follows from the truth of others, this finds expression in relations in which the forms of the propositions stand to one another: nor is it necessary for us to set up these relations between them, by combining them with one another in a single proposition; on the contrary, the relations are internal, and their existence is an immediate result of the existence of the propositions. (*TLP* 5.131)

What justifies an inference from one proposition to another is the relation between their truth-grounds, and this has to do with a structural or formal relation between the propositions, not with their content: it is something that can be determined by the symbols alone. The structural or formal relations between propositions is not one that depends upon the meaning of any

expression (or logical indefinable) that occurs in the propositions, but is an internal relation between the propositional symbols themselves.

4. As we have already seen, a proposition is the proposition it is only in the context of a system of representation that stands in a projective relation to the world. This system of representation is constituted by the totality of elementary propositions together with all the propositions that can be constructed from them. Thus, the whole of logical space is given with the system of representation. Insofar as the existence of a proposition presupposes the system of representation to which it belongs, it presupposes the whole of logical space:

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

A proposition does not exist and then have to be put in logical relations with other propositions. Rather, insofar as a proposition is a determination of logical space, it already stands in logical relations to the totality of propositions that constitute the whole of logical space: 'A proposition can determine only one place in logical space: nevertheless the whole of logical space must already be given by it' (*TLP* 3.4). The logical relation between a proposition and the rest of logical space is not one that has to be established. An internal relation between a proposition and the whole of logical space is intrinsic to the system of representation to which a proposition essentially belongs and which constitutes it as the proposition it is.

Wittgenstein sums up the point as follows:

If p follows from q , I can make an inference from q to p , deduce p from q .

The nature of the inference can be gathered only from the two propositions.

They themselves are the only possible justification of the inference. (*TLP* 5.132)

There are no indefinable logical relations whose interconnections are expressed in substantive laws of the form $(\forall p)(\forall q)(p \& q) \rightarrow p$. The only ground for the inference from $p \& q$ to p lies in the internal relation between these propositional symbols within a system of representation that stands in a projective relation to the world, and which constitutes these symbols as the propositions they are. No connection needs to be made between $p \& q$ and p , insofar as the sense of $p \& q$ already stands in an internal relation to the sense of p —the determination of logical space that is made in affirming $p \& q$ already

includes the determination of logical space that is made in affirming p —and this on its own justifies the inference from one to the other. Thus:

‘Laws of inference’, which are supposed to justify inferences, as in the works of Frege and Russell, have no sense, and would be superfluous. (*TLP* 5.132)

They have no sense insofar as they are expressed by tautologies: propositions whose representational relation to the world has been cut. They are superfluous insofar as the internal relation between the propositions themselves already justifies the deduction of one from the other.

This account of the nature of inference clearly depends upon Wittgenstein’s commitment to the idea that a thought includes a complete, clear, and explicit representation of everything that it entails. When we draw a logical conclusion from propositions already accepted as true, then we are merely drawing out, or making explicit, something that is already implicitly contained in the act of affirming the premises. This conception of the nature of the internal relation between propositions, which justifies the inference of one from the other, is later abandoned by Wittgenstein, along with the idea that a proposition is a clear and complete representation of a state of affairs. Later on, he conceives the internal relation between propositions, which grounds the inference from one to the other, in terms of the existence of a rule of transition. Thus, he does not abandon the idea that inference is based on an internal relation between forms of proposition, but the idea of this internal relation is no longer conceived in terms of the mythological idea of a thought as a complete and exact expression of its sense. The important point is that the transition from one proposition to another in an act of inference does not depend on anything external to the system of representation to which the propositions belong. It does not, in particular, depend upon the existence of a substantial law that connects one form of proposition with another.

Thus, logic is not a kind of ‘ultra-physics’ that describes the logical structure of the world and which justifies the inference of one proposition from another; logical inference is completely distinct from causal inference. Logical inference does not depend on anything outside the rules of the symbolism. In the *Tractatus*, Wittgenstein’s commitment to the idea of an essence of all representation preserves the idea that what can be inferred from what is not a matter in which we have any say: it is grounded in what is essential to all representation as such. Once this idea is abandoned, then it may seem as if ‘logic altogether disappear[s]’ (*PI* 108); an idea that clearly preoccupies him in the later philosophy. I will take up the question of the relation between the

early and the later approach to the problem of understanding the nature of inference in Chapter 12.

5. Wittgenstein goes on in the *Tractatus* to make this distinction between logical and causal inference explicit:

All deductions are made a priori.

One elementary proposition cannot be deduced from another.

There is no possible way of making an inference from the existence of one situation to the existence of another, entirely different situation.

There is no causal nexus to justify such an inference.

We *cannot* infer the events of the future from those of the present.

Superstition is nothing but belief in the causal nexus. (*TLP* 5.133–5.1361)

In the case of a causal inference, we need a law that connects one type of situation with another, in order to be able to infer the existence of one situation from the existence of another, entirely different situation. In the case of a logical inference, no such law is needed. No law is needed because, in this case, the move from one proposition to another is justified by the internal relation that holds between the propositions—i.e. the propositional symbols—themselves. The mythology arises insofar as this internal relation is conceived as a matter of the sense of one proposition containing the sense of the other, so that all the logical entailments of a thought are conceived as already present in it. Inferring is now just a matter of drawing out what is, in some sense, already there; thinking a thought essentially involves thinking everything that the truth of the thought entails. Once this idealized conception of the sense of a proposition is abandoned, the internal relation between propositions is understood as the ‘derivation of one sentence from another according to a rule’ (*RFM*, p.39). A move which, as I noted just now, may seem to threaten ‘the hardness of the logical *must*’ (*RFM*, p.84).

Wittgenstein’s discussion continues:

The freedom of the will consists in the impossibility of knowing actions that still lie in the future. We could know them only if causality were an *inner* necessity like that of logical inference.—The connexion between knowledge and what is known is that of logical necessity.

(‘*A* knows that *p* is the case’, has no sense if *p* is a tautology.) (*TLP* 5.1362)

It has been suggested, for example, by both Black and Anscombe, that in the final sentence of the first paragraph, Wittgenstein is pointing out the logical connection between ‘*A* knows *p*’ and *p*. This reading does little, however, to

connect Wittgenstein's observation with the context in which it occurs. It is much more natural to understand the remark in a way that bears on the contrast that Wittgenstein wants to make between causal and logical inference. His suggestion is that we cannot know future actions because there is no internal connection between a current event and a future event. The description of a future action would, on his current understanding of the notion of an internal relation, have to be contained in the description of a present act or state of mind, in order for the former to be known on the basis of the latter, that is, the truth of the former would have already to be included in the truth of the latter. Given that the truth of a proposition about a future action cannot be included in the truth of a proposition about a current state of affairs, it seems the connection between a current state of affairs and a future action must be an external, or causal one. The point of the final sentence of the first paragraph is that our knowledge extends only so far as what is logically entailed by what we know, and no further. It extends this far insofar as these logical entailments are somehow already there, present in the propositions that are known. Thus, we cannot know actions that lie in the future. The connection with the remark in parentheses is now clear: '*A* knows that *p*' has no sense if *p* is a tautology insofar as a tautology is a logical consequence of everything we know. That is to say, if *p* is a tautology, '*A* knows that *p*' does not do anything to determine the logical space that is occupied by what is known.

6. Wittgenstein's understanding of the nature of inference allows him to approach the distinctive status of tautologies and contradiction from a new direction. At *TLP* 5.14, he writes:

If one proposition follows from another, then the latter says more than the former, and the former less than the latter.

Using the image of logical space, we can understand this as the claim that if one proposition follows from another, then the latter determines a greater region of logical space than the former. The area of logical space determined by the entailed proposition is a proper part of the area of logical space that is determined by the proposition that entails it. He goes on:

If *p* follows from *q* and *q* from *p*, then they are one and the same proposition. (*TLP* 5.141)

That is to say, they occupy the same region of logical space and are therefore the same proposition. The distinctive status of tautologies and contradictions can now be understood as follows:

A tautology follows from all propositions: it says nothing. (*TLP* 5.142)

A proposition that is entailed by every proposition must leave logical space completely undetermined: it says nothing.

Wittgenstein goes on:

Contradiction is that common factor of propositions which *no* proposition has in common with another. Tautology is the common factor of all propositions that have nothing in common with one another.

Contradiction, one might say, vanishes outside all propositions: tautology vanishes inside them.

Contradiction is the outer limit of propositions: tautology is the insubstantial point at their centre. (*TLP* 5.143)

A contradiction is not contained in—i.e. affirmed by—any proposition. A tautology is common to all propositions insofar as no proposition excludes it. Thus, a contradiction lies outside logical space: no determination of logical space contains it; a tautology always lies inside logical space no matter how it is determined: every determination of logical space contains it. Once again, it is clear that tautologies and contradictions are the limiting case of a proposition. They are part of the symbolism, but their relation to logical space is quite distinct from that of a proposition with sense; in a certain sense, neither a tautology nor a contradiction lies inside logical space. A proposition represents insofar as it determines a place in logical space; what lies outside logical space does not represent a state of affairs.

7. At *TLP* 5.2–5.21, Wittgenstein introduces the notion of an operation, which he connects with the concept of an internal relation. He begins by giving a quite general characterization of an operation:

The structures of propositions stand in an internal relation to one another. In order to give prominence to these internal relations we can adopt the following mode of expression: we can represent a proposition as the result of an operation that produces it out of other propositions (which are the bases of the operation).

Thus, the notion of an operation is introduced as a way of symbolizing an internal relation between propositions: an operation is equivalent to a rule that transforms one propositional form into another, that is, which constructs a proposition of one form on the basis of a proposition of another form. Thus:

An operation is the expression of a relation between the structures of its results and of its bases. (*TLP* 5.22)

An operation is the expression of a structural relation between propositions. An operation does not introduce a propositional constituent, but transforms a proposition of one form into a proposition of another form. It is a sign for a rule of transition between propositional forms. Thus:

The operation is what has to be done to the one proposition in order to make the other out of it. (*TLP* 5.23)

Wittgenstein goes on:

And that will, of course, depend on their formal properties, on the internal similarity of their forms. (*TLP* 5.231)

The result of the application of an operation to a proposition is itself a proposition. The base and the result share a formal similarity: both belong to the system of propositions.

Wittgenstein now goes on to state explicitly that both the rule by which a series of propositional forms is ordered and the logical constants are instances of operations. In Chapter 7, we saw Wittgenstein make a distinction between an empirical series of objects, ordered by an external relation between individual pairs of objects, and a formal series, or series of forms, ordered by an internal relation between the symbols that are the terms of the series of forms. In the latter case, the order is the result of a rule that generates, for any arbitrary term belonging to the series of forms, the term that follows it in the series of forms. Thus, the rule by which a formal series is constructed is an operation:

The internal relation by which a series is ordered is equivalent to the operation that produces one term from another. (*TLP* 5.232)

When we are dealing with propositional forms that are ordered according to a rule, or formal law, then we have an instance of an operation that generates one propositional form from another. Given the operation and the first term of the series of forms, we can generate all the other terms.

It is clear from Wittgenstein's definition of an operation that operations do not occur in elementary propositions: an operation is a rule for constructing one propositional form from another. Thus:

Operations cannot make their appearance before the point at which one proposition is generated out of another in a logically meaningful way; i.e. the point at which the logical construction of propositions begins. (*TLP* 5.233)

Elementary propositions provide the ultimate bases on which operations operate in order to construct further propositions out of them. Truth-functions of elementary propositions are the result of an operation:

Truth-functions of elementary propositions are results of operations with elementary propositions as bases. (These operations I call truth-functions.) (*TLP* 5.234)

A truth-function is a way of symbolizing the formal relation between a molecular proposition and the propositions that are its atoms, and is the result of an operation. A truth-function is the result of an operation that can be expressed in the form of a schema of *T*'s and *F*'s, for example, in the form of the propositional sign (*TTFT*)(*p, q*). Thus, what characterizes the truth-functions is that they are all the result of operations that determine the sense of a complex proposition from the senses of the propositions that are its bases. For example, the symbol ' \rightarrow ' is an expression for an operation that has *p* and *q* as its bases and which turns the sense of *p* and the sense of *q* into a truth-function of the sense of *p* and the sense of *q*; the sense of the truth-function is expressed by the propositional sign (*TTFT*)(*p, q*). Thus, ' \rightarrow ' is an operation that takes us from the sense of *p* and the sense of *q* to the sense of ' $p \rightarrow q$ ':

The sense of a truth-function of *p* is a function of the sense of *p*.

Negation, logical addition, logical multiplication, etc. etc. are operations.

(Negation reverses the sense of a proposition.) (*TLP* 5.2341)

Thus, the problem that Wittgenstein raises for Frege's treatment of negation (that it leaves the sense of ' $\neg p$ ' 'absolutely undetermined') disappears. Once we recognize that the truth-functions are the result of operations, then it becomes perspicuous how the sense of ' $\neg p$ ' is determined on the basis of the sense of *p*: the sense of the proposition expressed by $\neg p$ is that $\neg p$ is true just in case the sense of the proposition expressed by *p* is false. Negation is the operation that reverses the sense of a proposition

It is clear that operations, unlike functions, contribute to determining the sense of a proposition in a way that is independent of the meaning of signs. A function, for example, xRy , is a rule that determines how the meaning of the name that fills the place of '*x*' must stand in relation to the meaning of the name that fills the place of '*y*' in order for the proposition in which xRy is a constituent to be true. An operation takes us from one form of propositional sign to another. The meaning of the constituents of the elementary propositions that are the ultimate bases of the operation plays no role in determining

the relation between the propositions that are generated from one another by means of an operation. Thus:

An operation manifests itself in a variable; it shows how we can get from one form of proposition to another. (*TLP* 5.24)

We do not have to mention the meaning of signs in giving the operation by which one proposition is produced on the basis of another. An operation does not occur as a constituent of a proposition, in the way a function does, but it changes a proposition of one form into a proposition of a different form:

It gives expression to the difference between forms. (*TLP* 5.24)

Wittgenstein goes on:

(And what the bases of an operation and its results have in common is just the bases themselves.) (*TLP* 5.24)

An operation is the expression of an internal relation between the propositions that are its bases and the proposition that is its result. The sense of the result of an operation is a truth-function of the senses of the propositions that are its bases. Thus, what p and $\neg p$ have in common is the sense of p : p occurs in $\neg p$ exactly as it occurs in p . The difference between p and $\neg p$ is how the truth-conditions (i.e. the sense) of p and $\neg p$ are determined relative to the base, that is, relative to the sense of p : the sense of $\neg p$ is that $\neg p$ is true just in case the sense of p is false, and vice versa. The positive proposition affirms the sense of p ; the negative proposition affirms the opposite: $\neg p$ reverses the sense of p . Thus, to determine the sense of p , is, by the same stroke, to determine the sense of $\neg p$: 'The positive *proposition* necessarily presupposes the existence of the negative *proposition* and vice versa' (*TLP* 5.5151). The nature of the difference between p and $\neg p$ is made perspicuous in Wittgenstein's truth-table notation: $p = (TF)(p)$; $\neg p = (FT)(p)$.

Wittgenstein goes on:

An operation is not the mark of a form, but only of a difference between forms. (*TLP* 5.241)

An operation does not characterize a form of a proposition, but an internal relation between the proposition that is its result and the propositions that are its bases. Thus, the difference between the operation expressed by 'v' and the operation expressed by '&' is a difference in the relation between the results of these operations and their bases. Once again, the difference can be made

perspicuous by Wittgenstein's truth-table notation: $p \vee q = (TTTF)(p, q); p \& q = (TFFF)(p, q)$. This makes it clear that the difference between the two propositions does not lie in the presence of different constituents—it is not the form of proposition that is different—but in the formal relation between the proposition that is the result of each operation and the propositions (p and q) that are its bases.

8. It is clear from all this that it is irrelevant to the application of an operation whether the propositions on which it operates are elementary or complex. It is exactly the same operation—i.e. exactly the same internal relation between bases and result—whether the propositions that are the bases themselves are elementary propositions or the result of one or more operations on elementary propositions. Wittgenstein makes the point as follows:

The schemata in 4.31 [i.e. the schemata that set out the truth-possibilities for 1, 2, and 3 propositions] have a meaning even when ' p ', ' q ', ' r ', etc. are not elementary propositions.

And it is easy to see that the propositional sign in 4.442 [i.e. $(TTFT)(p, q)$] expresses a single truth-function of elementary propositions even when ' p ' and ' q ' are truth-functions of elementary propositions. (*TLP* 5.31)

Thus, the very same operation that is applied to its bases can also be applied to its result:

The operation that produces ' q ' from ' p ' also produces ' r ' from ' q ', and so on.

Wittgenstein goes on:

There is only one way of expressing this: ' p ', ' q ', ' r ', etc. have to be variables that give expression in a general way to certain formal relations. (*TLP* 5.242)

In other words, what an operation operates on is presented by means of a variable that brings into prominence the relation between the bases and the result; how the bases themselves are arrived at is irrelevant. An operation corresponds to a formal relation, and not to a form as such. Thus, what is common between the propositions $\neg p$ and $\neg\neg p$ is the formal relation that each proposition bears to the proposition that is its base, that is, to p and $\neg p$ respectively. In this case, it is clear that this is not a matter of a common constituent that characterizes the sense of $\neg p$ and the sense of $\neg\neg p$, but of how each of the propositions that is the result of the operation of negation is generated from the proposition that is its base. In each case, the result of the operation

is to reverse the sense of the proposition that is its base. By contrast, a variable that presents a propositional function corresponds to a common characteristic of all the propositions that are its values: it is a rule for the construction of the members of a class of propositions, whose common characteristic it is.

One of Wittgenstein's main objections to Frege and Russell's treatment of the logical constants as predicates and relations is that it is committed to holding that the logical constants make a substantive contribution to the sense of propositions in which they occur. This, he believes, fails to make perspicuous that p and $\neg p$ have the same content but opposite senses, or that p and $\neg\neg p$, or $p \rightarrow q$ and $\neg(p \& \neg q)$, are the same proposition. Wittgenstein's treatment of the logical constants as operations expresses '[his] fundamental idea . . . that the "logical constants" are not representatives' (*TLP* 4.0312). Once we have recognized that the logical constants are operations, and that they make no substantive contribution to the representation of states of affairs, then all the problems associated with Frege and Russell's conception disappear.

Thus, the following has become clear:

The occurrence of an operation does not characterize the sense of a proposition.

Indeed, no statement is made by an operation, but only by its result, and this depends on the bases of the operation.

(Operations and functions must not be confused with each other.) (*TLP* 5.25)

An operation does not characterize the sense of a proposition, but transforms the senses of the propositions that are its bases to the sense of the proposition that is its result. The operation itself says nothing, that is, it does not introduce a new constituent into the result that was not there in the bases. The sense of the result is a transformation of the senses of the bases, but what turns one into the other is not itself a constituent in the sense of the result. Thus, $\neg\neg p$ does not have a constituent that p does not have, and $p \rightarrow q$ does not have different constituents from $\neg(p \& \neg q)$. Moreover, the formal relation between $\neg\neg p$ and its base, $\neg p$, is such that $\neg\neg p$ has the same sense as p (each corresponds to the propositional symbol $(TF)(p)$); similarly, the formal relation between $p \rightarrow q$ and its bases, p and q , and the formal relation between $\neg(p \& \neg q)$ and its base, $(p \& \neg q)$, is such that each has the same sense (each corresponds to the propositional symbol $(TTFT)(p, q)$). Thus, it becomes clear that in each case the two symbols, despite the presence of different operations, are in fact an expression of one and the same proposition. It

also becomes clear that the application of an operation to a proposition (e.g. the application of negation to $\neg p$) can reverse the effect of a previous application of an operation (the application of negation to p). Thus:

One operation can counteract the effect of another. Operations can cancel one another.

An operation can vanish (e.g. negation in ' $\neg \neg p$ ': $\neg \neg p = p$). (*TLP* 5.253–5.254)

It is now clear that an operation is completely different from a function. A function characterizes the sense of a proposition; it is an expression, that is, 'the mark of a form and a content' (*TLP* 3.31). An operation is a rule of transition from one propositional form to another. A function cannot be its own argument, insofar as no function can share a mode of signification with the expressions that are its arguments. By contrast, an operation can always 'take one of its own results as its base' (*TLP* 5.251). As we have already seen, an operation can therefore be the rule for the construction of a series of propositional forms:

It is only in this way that the step from one term of a series of forms to another is possible . . . (*TLP* 5.252)

Wittgenstein goes on:

. . . (from one type to another in the hierarchies of Russell and Whitehead).

The remark is telegraphic and it would take a great deal of time to explicate it fully. However, Wittgenstein's fundamental point is clear. Wittgenstein believes that Russell and Whitehead wrongly conceive of their type-hierarchies as fundamentally an ordering of non-linguistic entities. He holds, by contrast, that the hierarchies are formal; that is to say, they correspond to a series of forms that is governed by a principle such that, given a member of arbitrary level belonging to the formal hierarchy, we can always construct the form of the next highest type. He believes that what we have here is a series of forms of symbols constructed according to a formal law, that is, by means of the repeated application of an operation.

9. We saw in the previous chapter that, given a set of elementary propositions, we can express all the propositions that can be constructed from them in a schema that systematically presents each possibility for agreement and disagreement with the truth-possibilities of the elementary propositions that are the members of the set. Wittgenstein gives an example of such a schema for a set of two elementary propositions, p and q , at *TLP* 5.101. As we saw in the

previous chapter, given that there is no proposition that cannot be expressed as a truth-function of a set of elementary propositions, it follows that, if we are given all elementary propositions, then we are in a position to determine all the propositions that can be constructed from them. And that constitutes the totality of propositions. However, now that Wittgenstein has made it clear that truth-functions are the result of operations on elementary propositions, he is in a position to express the point more precisely:

All truth-functions [i.e. all propositions] are results of successive applications to elementary propositions of a finite number of truth-operations. (*TLP* 5.32)

That is to say, there is no proposition that cannot be expressed as the result of the application of one or more truth-operations to a set of elementary propositions: 'Every proposition is the result of truth-operations on elementary propositions' (*TLP* 5.3).

Wittgenstein goes on:

At this point it becomes manifest that there are no 'logical objects' or 'logical constants' (in Frege's and Russell's sense). (*TLP* 5.4)

He then expands on this point as follows:

The reason is that the results of truth-operations on truth-functions are always identical whenever they are one and the same truth-function of elementary propositions. (*TLP* 5.41)

Thus, as we've already seen, an operation does not characterize the sense of a proposition, but is the expression of a relation between the sense of the result of its application and the senses of the propositions that are its bases. This formal relation is perspicuously presented by means of the truth table: $p \rightarrow q$, $\neg(p \& \neg q)$, $\neg p \vee q$ are all ways of expressing the proposition that is more perspicuously expressed by the symbol (*TFTT*)(p, q). This, Wittgenstein believes, makes it transparent that nothing corresponds to \rightarrow , \neg , $\&$, \vee : they are not expressions, that is, they are not a 'mark of a form and a content'. They do not make any substantive contribution to the sense of propositions in which they occur. Thus:

It is self-evident the \vee , \rightarrow , etc are not relations in the sense in which right and left etc. are relations. (*TLP* 5.42)

The logical constants do not represent real relations between things, but give expression to an internal relation between a proposition and the propositions

that are its atoms. That is to say, the operations that are expressed by the signs $-$, $\&$, v , \rightarrow do not represent.

Wittgenstein connects the logical distinction between v , \rightarrow , and the like and real relations with a distinctive feature of the former:

Though it seems unimportant, it is in fact significant that the pseudo-relations of logic, such as v and \rightarrow , need brackets—unlike real relations. (*TLP* 5.461)

The use of brackets is essential to demarcate the relative scope of the operations that occur in a proposition. The scope of the operations in a proposition corresponds to the order in which the operations are applied. Thus, in $-(p\&q)$, ‘ $-$ ’ has large scope, which is to say that p and q are first of all conjoined and the result is then negated; in $-p\&q$, ‘ $\&$ ’ has large scope, which is to say that p is first of all negated and the result is then conjoined with q . By contrast, there is nothing equivalent to scope in a proposition of the form aRb that expresses a real relation between objects. The necessity for brackets in connection with $-$, $\&$, v , \rightarrow , and so on indicates that these are expressions for operations, that is, for the transition from one propositional form to another, and not for relations between things. It is, in other words, a clear sign that the role of $-$, $\&$, \rightarrow , and so on is to structure the complex proposition relative to its bases, in somewhat the way brackets or punctuation signs structure a proposition. The structure of a proposition determines the relation between the sense of the whole and the sense of the parts, but it makes no substantive contribution to content. Thus:

Signs for the logical constants are punctuation-marks. (*TLP* 5.4611)

It is, therefore, in the nature of an operation that, if we introduce it properly, we introduce it as the expression of a formal relation between the propositions that serve as bases and the proposition that is the result. This means that when we introduce, for example, the operation that is expressed by ‘ v ’, we must introduce it in such a way that we have, in a single stroke, introduced it in all possible combinations, that is, ‘not only ‘ pvq ’ but ‘ $-(pv-q)$ ’, as well, etc. etc.’ (*TLP* 5.46). In the same way, ‘[w]e should also have introduced at the same time the effect of all possible combinations of brackets’ (*TLP* 5.46). We must introduce ‘all possible combinations of brackets’ because we are dealing here, not with a genuine indefinable that is a constituent of the sense of a proposition, but with a method for the logical construction of one form of proposition from another. Thus, the proper way to introduce the logical signs $-$, $\&$, v , \rightarrow , $(\exists x)Fx$ is not as primitive signs that stand for predicates and

relations, but in the form of a variable that gives expression in a completely general way to certain formal relations. Thus:

it would have been made clear that the real general primitive signs are not ' pvq ', ' $(\exists x)fx$ ', etc. but the most general form of their combinations. (*TLP* 5.46)

What is made clear is that the logical signs \neg , $\&$, \vee , \rightarrow , $(\exists x)Fx$, and so on express formal relations between propositions, and do not represent.

10

Logic and the General Form of a Proposition

1. One of the main themes of the last two chapters has been that all propositions are the result of truth-operations on elementary propositions. The concept ‘all propositions’ is, of course, a formal concept. It must, therefore, be equivalent to a variable that expresses what all its values have in common. In the previous chapter, we saw Wittgenstein give informal expression to the variable that corresponds to the general form of a proposition: this is how things stand. What the variable expresses is that the essence of a proposition is given with the essence of elementary propositions: if we are given all elementary propositions, then we can construct all propositions out of them. The variable calls for a more precise expression. Wittgenstein begins to anticipate the possibility of a more precise expression of the general form of a proposition as follows:

When a truth-operation is applied to the results of truth-operations on elementary propositions, there is always a *single* operation on elementary propositions that has the same result. (*TLP* 5.3)

That is to say, all propositions can be constructed from elementary propositions by means of the repeated application of a single truth-operation. The possibility of expressing all truth-functions using a single operation had been proved by Sheffer in 1913. Wittgenstein goes on to introduce joint denial, a version of Sheffer’s stroke, as the operation that constructs all propositions out of elementary propositions.

At *TLP* 5.47, Wittgenstein writes:

It is clear that whatever we can say *in advance* about the forms of all propositions, we must be able to say *all at once*.

What this amounts to is that we must be able to express what all propositions have in common by means of a single variable that has all propositions as

its values. This variable will correspond to the rule by which all propositions are constructed logically from elementary propositions. The variable makes it perspicuous that, if elementary propositions are given, then all propositions are given:

If we are given a proposition, then *with it* we are also given the results of all truth-operations that have it as their base. (*TLP* 5.442)

An elementary proposition really contains all logical operations in itself. (*TLP* 5.47)

Thus, it is clear that nothing is said by means of a logical operation: given two elementary propositions, p and q , that represent states of affairs that can either exist or not exist, we are also given $\neg p$, $\neg q$, $p \& q$, $p \rightarrow q$, and so on. Even general propositions, which we'll look at in detail below, are contained in—i.e. are logical constructions out of—elementary propositions. We can see this, Wittgenstein suggests, by the fact that “*fa*” says the same thing as “ $(\exists x).fx.x = a$ ”.’ Thus, it is clear that there is nothing in the proposition ‘ $(\exists x).fx.x = a$ ’ corresponding to the quantifier, $(\exists x) \dots x$, insofar as what is said by the above proposition is also said by a proposition, Fa , in which the quantifier does not occur. For Wittgenstein, this shows that the quantifier does not characterize the sense of a proposition. This leads Wittgenstein to treat general propositions quite differently from the way they are treated by Frege and Russell. The quantifier is not treated as a logical primitive that takes propositional functions as arguments. Rather Wittgenstein breaks general propositions down into a rule for the construction of a class of elementary propositions—all the values of the function Fx —and a truth-operation on this class.

Thus, he ‘dissociate[s] the concept *all* from truth-functions’ (*TLP* 5.521). Wittgenstein’s treatment of the generality sign, as we shall see, allows him to maintain that all propositions, including general propositions, belong to a single system of propositions that is constructed by means of the application of a single operation to elementary propositions. Thus:

One could say that the sole logical constant was what *all* propositions, by their very nature, had in common with one another. (*TLP* 5.47)

That is to say, the sole logical constant is the operation that generates all propositions from elementary propositions. What all propositions have in common is what is expressed by the operation that produces all of them from a given base:

But that is the general propositional form. (*TLP* 5.47)

Wittgenstein goes on:

The general propositional form is the essence of a proposition. (*TLP* 5.471)

The general propositional form expresses what all propositions have in common insofar as it expresses the rule for the logical construction of propositions, and thus has all propositions as its values.

2. Wittgenstein introduces the operation that systematically generates all propositions as follows:

Every truth function [i.e. every proposition] is a result of the successive applications to elementary propositions of the operation

‘(----- T)(ξ , ...)’

This operation negates all the propositions in the right-hand pair of brackets, and I call it the negation of those propositions. (*TLP* 5.5)

Wittgenstein now introduces a notational device:

When a bracketed expression has propositions as its terms—and the order of the terms inside the brackets is indifferent—then I indicate it by a sign of the form ‘ $\overline{(\xi)}$ ’. ‘ ξ ’ is a variable whose values are terms of the bracketed expression and the bar over the variable indicates that it is representative of all its values in the brackets. (*TLP* 5.501)

He goes on to remark that the values of this variable is something that is stipulated, and he lists three ways in which the values can be described: (1) by direct enumeration ($\xi = p, q, r$); (2) by ‘giving a function f_x whose values for all values of x are the propositions to be described’ ($\xi = Fa, Fb, Fc, \dots$) (3) by ‘giving a formal law that governs the construction of propositions’ ($\xi = aRb; \exists x(aRx \& xRb); \exists x \exists y(aRx \& xRy \& yRb) \dots$). If we now introduce the sign ‘ N ’ as the sign for joint negation, then we can express the operation that corresponds to the sign ‘(----- T)(ξ , ...)’ as follows: ‘ $N(\overline{\xi})$ ’. Thus:

$N(\overline{\xi})$ is the negation of all the values of the propositional variable ξ . (*TLP* 5.502)

The operation expressed by $N(\overline{\xi})$ is not strictly equivalent to Sheffer’s stroke, which is a two-place operator. $N(\overline{\xi})$ is a multi-grade operator, which jointly negates all the propositions that are the values of the variable ξ , that is, it corresponds to the operation expressed by the sign (----- T)(ξ , ...).

Wittgenstein’s claim is that all propositions are the result of the successive applications of the operation of joint denial to elementary propositions: ‘every proposition is a result of successive application to elementary propositions of

the operation $N(\bar{\xi})$ ' (TLP 6.001). If we restrict our attention to propositions that are constructed out of elementary propositions by means of the truth-operations \rightarrow , $\&$, \vee , $-$, then the claim is one that had already been proved by Sheffer. In this case, the values of the variable in $N(\bar{\xi})$ can be specified by direct enumeration; they will be all the elementary propositions that occur as the atoms in the complex propositions that are constructed by means a finite number of applications of the truth-operations \rightarrow , $\&$, \vee , $-$. We can show that this is the case when $\xi = p$ and $\xi = (p, q)$ as follows:

- | | | |
|----------------|--------------------------|--------|
| 1. $N(p)$ | $-p$ | (FT) |
| 2. $N(N(p))$ | p | (TF) |
| 3. $N(1, 2)$ | $p\&-p$ | (FF) |
| 4. $N(3)$ | $-(p\&-p)$ | (TT) |
| | | |
| 1. $N(p, q)$ | $-p\&-q$ | (FFFT) |
| 2. $N(1)$ | $-(-p\&-q)$ | (TTTF) |
| 3. $N(1, 2)$ | $p\vee q\&-(p\vee q)$ | (FFFF) |
| 4. $N(3)$ | $-(p\vee q\&-(p\vee q))$ | (TTTT) |
| 5. $N(1, p)$ | $-p\&q$ | (FTFF) |
| 6. $N(5)$ | $-(-p\&q)$ | (TFTT) |
| 7. $N(3, p)$ | $-p$ | (FTFT) |
| 8. $N(7)$ | p | (TFTF) |
| 9. $N(1, q)$ | $p\&-q$ | (FFTF) |
| 10. $N(9)$ | $-(p\&-q)$ | (TTFT) |
| 11. $N(3, q)$ | $-q$ | (FFTT) |
| 12. $N(11)$ | q | (TTFF) |
| 13. $N(5, 9)$ | $p \leftrightarrow q$ | (TFFT) |
| 14. $N(13)$ | $(p\&-q)\vee(-p\&q)$ | (FTTF) |
| 15. $N(7, 11)$ | $p\&q$ | (TFFF) |
| 16. $N(15)$ | $-(p\&q)$ | (FTTT) |

Thus, starting with either a single proposition, p , or two propositions, p and q , as bases, we can generate every truth-function of p , and of p and q , by iterated applications of the operator $N(\bar{\xi})$. The propositions generated by successive applications of $N(\bar{\xi})$ do not constitute a fully ordered formal

series, since there is no unique first, second, third, and so on term. The propositions that are generated by successive applications of $N(\bar{\xi})$ to subsets of elementary propositions can, however, be partially ordered by the number of nested occurrences of ‘ N ’ that occur in them. Thus, given the totality of elementary propositions as bases, the operator $N(\bar{\xi})$ expresses an operation that generates all propositions, as terms, out of selected subsets of elementary propositions. What all propositions—i.e. what all terms of this partially ordered series—have in common can therefore be expressed by means of the following variable:

$$[\bar{p}, \bar{\xi}, N(\bar{\xi})],$$

where \bar{p} is stipulated to be the totality of elementary propositions, $\bar{\xi}$ is any stipulated subset of elementary propositions, and $N(\bar{\xi})$ is the operation of joint negation applied successively to the elementary propositions in this subset. This is the general form of a proposition:

The general form of a truth-function is $[\bar{p}, \bar{\xi}, N(\bar{\xi})]$.

This is the general form of a proposition.

What this says is just that every proposition is a result of successive applications to elementary propositions of the operation $N(\bar{\xi})$. (*TLP* 6–6.001)

3. All propositions that are built from elementary propositions by means of \neg , $\&$, \vee , \rightarrow are values of the variable that expresses the general form of a proposition. However, Wittgenstein claims that *all* propositions are truth-functions of elementary propositions, and thus that *all* propositions, including general propositions, are expressible by iterated applications of the single operation $N(\bar{\xi})$ to elementary propositions. However, as we shall see, the claim is problematic. Wittgenstein presents his treatment of general propositions in the 5.2s. In the case of a proposition involving the sign for generality, the class of propositions to which the operator $N(\bar{\xi})$ is applied is determined by a function (method 2 in *TLP* 5.501). Wittgenstein gives the simplest case at *TLP* 5.52, as follows:

If ξ has as its values all the values of a function f_x for all values of x , then $N(\bar{\xi}) = -(\exists x)f_x$.

That is to say, $-(\exists x)F_x$ is equivalent to the joint denial of all the propositions that are the values of the propositional function F_x . This propositional function has as its values all the propositions that can be constructed from F_x for all values of x . The joint negation of this set of propositions is the

sense of $-(\exists x)Fx: -Fa \& -Fb \& -Fc \dots$. We might write it ' $N(F(\text{all}))$ ', but as a way of keeping argument places clear in cases in which the propositional function has more than one argument, we will write it, following Geach, as ' $N(x:Fx)$ '.¹ Clearly, we can also express $\exists xFx$ as the joint denial of the joint denial of all the propositions that are the values of $Fx: N(N(x:Fx))$, that is, $-(-Fa \& -Fb \& -Fc \dots)$. In both of these cases, $N(\bar{\xi})$ operates on the whole set of elementary propositions that are the values of the function Fx :

1. $-(\exists x)Fx \quad (\forall x)-Fx \quad N(x:Fx)$
2. $(\exists x)Fx \quad -(\forall x)-Fx \quad N(N(x:Fx))$

Thus, Wittgenstein's treatment of propositions of general propositions avoids the problem that he claims, in 'Notes on Logic', arises for Frege and Russell's treatment, namely, that they are forced to hold that xRy occurs in two different ways in propositions: in one way in propositions of the form aRb and in another way in propositions of the form $(\exists x, y)xRy$. On his treatment, xRy occurs *only* as a propositional function whose values are elementary propositions. He does not treat the quantifiers as a second-level concept that provides for another way of building propositions from first-level concepts, in the way that Frege and Russell do. Rather, he splits off, in a general proposition, the role of *all* and the role of the truth-functions:

I dissociate the concept of *all* from truth-functions. (*TLP* 5.521)

What Frege and Russell treat as a single expression—the second-level concept ' $(\exists x) \dots x$ '—Wittgenstein breaks down into the generality sign, which specifies *all* the values of a specified propositional function, and the truth-operation of joint negation on the elementary propositions that are the values of this propositional function. Thus:

The generality-sign occurs as an argument. (*TLP* 5.523)

We are now in a position to understand what Wittgenstein means by the following remark:

Frege and Russell introduced generality in association with logical product or logical sum. This made it difficult to understand the propositions ' $(\exists x)fx$ ' and ' $(x)fx$ ', in which both ideas are embedded. (*TLP* 5.521)

Both Frege and Russell specify the truth-conditions of $(\forall x)Fx$ directly, by means of the following rule: $(\forall x)Fx$ is true if $F(\xi)$ is true for all arguments.

¹ See Geach, 1981.

This is to attempt to define generality directly in terms of the notions of logical product and logical sum, and, as we've seen, it has the disadvantage of treating Fx as occurring in propositions in two different ways. Wittgenstein, by contrast, breaks the general proposition down into the sign for generality and a truth-function which operates on *all* the elementary propositions that are the values of the propositional function Fx . That is to say, the sense of a general proposition is given via (1) a rule for determining a class of elementary propositions (e.g. the propositions that are all the values of the function Fx), and (2) an operation on this class of propositions that gives the sense of the general proposition (e.g. the sense of $(\forall x)Fx$ is the logical product of the senses of the propositions that are all the values of the function Fx for all values of x). Thus, *both* the idea of generality *and* the idea of logical sum/logical product are contained in ' $(\exists x)Fx$ ' and ' $(\forall x)Fx$ '.

However, while Wittgenstein treats general propositions differently from the way they are treated by Frege and Russell, he clearly recognizes the adequacy of their notation. The notation does not, as Wittgenstein understands it, show that existence is a second-level concept, but rather it serves to make clear the logical prototype whose values are the bases of the logical product or logical sum that is the proposition expressed by a general propositional sign. The proposition expressed by a propositional sign of the form $(\exists x)Fx$ or $(\forall x)Fx$ is a truth-function of the elementary propositions that are all the values of Fx for all values of x , and by indicating the logical prototype— Fx —the general propositional sign makes this multiplicity perspicuous, that is, it shows it.²

However, there is a problem for Wittgenstein's account. In order to express the remaining two simple quantified propositions, $(\exists x)\neg Fx$ and $\neg(\exists x)Fx$, the operator $N(\bar{\xi})$ has to be applied first to the propositional function and then to all the values of the negated propositional function.

3. $\neg(\exists x)\neg Fx$ $(\forall x)Fx$ $N(x:N(Fx))$
4. $(\exists x)\neg Fx$ $\neg(\forall x)Fx$ $N(N(x:NFx))$

² At *TLP* 4.0411, Wittgenstein sets out the advantages of the quantifier notation. The generality of a logical prototype is expressed by means of variables and the advantage of the quantifier notation is that it uses variables in a way that makes the relevant logical prototype clear. Accidental generality is expressed by a truth-function of the propositions that are the values of the relevant prototype. The generality of the prototype is not adequately expressed by the other notations for generality that Wittgenstein considers in *TLP* 4.0411; these alternative notations therefore fail to show the multiplicity of the proposition expressed by a propositional sign that contains the sign for generality. For further discussion of the inadequacies of these alternatives see Anscombe, 1971, chapter 11.

This means that we are applying $N(\bar{\xi})$, not only to sets of elementary propositions to yield a truth-function of these propositions as a result, but also to simple propositional functions to yield a complex propositional function as a result. The general propositions $(\forall x)Fx$ and $\neg(\forall x)Fx$ are truth-functions of the set of complex propositions that are the values of this complex propositional function. Yet Wittgenstein has given no account of this use of $N(\bar{\xi})$; $N(\bar{\xi})$ is introduced *only* as an operation on propositions. Moreover, this seems to open Wittgenstein up to a version of his criticisms of Frege and Russell's treatment of the quantifiers. For he is committed to holding that xRy occurs as a constituent, not only in aRb , but also in $x:NxRy$, which is neither an elementary proposition nor a prototype that has elementary propositions as values.

The problem is not a serious one if we suppose that the proposition expressed by a general propositional sign can actually be rewritten as a truth-function of elementary propositions, that is, if, for example, $N(N(x:Nfx))$ can be rewritten as $N(N(N(Fa),N(Fb),N(Fc),\dots))$, but this will be the case only if the number of names is finite. Yet this is something that Wittgenstein clearly does not commit himself to:

What the axiom of infinity is intended to say would express itself in language through the existence of infinitely many names with different meanings. (*TLP* 5.535)

4. In fact, Wittgenstein very quickly comes to realize that his treatment of generality in the *Tractatus* is problematic. The problem he focuses on is the quite general problem of the impossibility of carrying out the analysis of a general proposition as a logical product or a logical sum in cases in which the number of names that can complete the relevant propositional function is not finite. Wittgenstein, as I just noted, clearly does not commit himself to there being only a finite number of names for simple objects in the *Tractatus*. However, it may be that he did not appreciate the problem posed by an infinite number of names at the time of writing it, because he is thinking that all the simple names are fixed within a system of representation. We have a means for constructing names: 'If objects are given, then at the same time we are given *all* objects' (*TLP* 5.524).³ Thus, it might seem that if we have a function, Fx ,

³ *TLP* 5.524 is a comment on *TLP* 5.52, in which Wittgenstein gives his analysis of $\neg(\exists x)Fx$ as the joint negation of all the values of the propositional function Fx . This suggests that he sees the connection between his treatment of generality and the existence of a rule for constructing all the values of the relevant logical prototype.

together with a method of constructing the simple names that are substitutable for x , then we have specified all the propositions belonging to the class ‘propositions that are all the values of the function Fx ’.

Writing in the early 1930’s, Wittgenstein characterizes his early view as follows:

My view about general propositions was that $(\exists x)\varphi x$ is a logical sum and that though its terms aren’t enumerated *here*, they are capable of being enumerated (from the dictionary and the grammar of the language).

For if they can’t be enumerated we don’t have a logical sum. (*PG*, p.268)

Wittgenstein goes on to acknowledge that the analysis works for certain special cases:

Of course it is correct that $(\exists x)\varphi x$ behaves in some ways like a logical sum and $(x)\varphi x$ like a product; indeed for *one* use of the words “all” and “some” my old explanation is correct,—for instance for “all the primary colours occur in this picture” or “all the notes of the C major scale occur in this theme”. (*PG*, p.268)

Thus, if he had committed himself to a finite number of names, his treatment of generality in the *Tractatus* would have been correct. However, this was not the case, and now he acknowledges that the account of generality does not work for cases in which there is no question of our actually carrying out the enumeration:

Of course, the explanation of $(\exists x)\varphi x$ as logical sum and of $(x)\varphi x$ as a logical product is indefensible. It went with an incorrect notion of analysis in that I thought that some day the logical product for a particular $(x)\varphi x$ would be found. (*PG*, p.268)

He gives an ordinary language case as a case for which the assumption clearly does not hold:

But for cases like “all men die before they are 200 years old” my explanation is not correct. (*PG*, p.268)

In these cases, there is no question of enumerating all the values of the function ‘ ξ dies before he is 200 years old’ for all values of the variable. The dots in the conjunction $Fa \& Fb \& Fc \dots$ are not just dots of laziness and, Wittgenstein now sees, his suggested analysis is therefore incorrect. Wittgenstein goes on to suggest that, in these cases, the way in which $(\exists x)\varphi x$ behaves like a logical sum is completely expressed by the rules $\varphi a \rightarrow (\exists x)\varphi x$ and $\varphi a \vee \varphi b \rightarrow (\exists x)\varphi x$.

Clearly, Wittgenstein's conception of the simple signs that are the end point of analysis does not prevent a similar problem arising for his treatment of generality in the *Tractatus*. The problem that Wittgenstein has just diagnosed arises insofar as the possibility of enumerating all the propositions that are the values of a given function is ruled out: there is no determinate list of propositions that are to be operated on by $N(\bar{\xi})$. In *Philosophical Grammar*, Wittgenstein gives the following example:

If I say the patch is in the square, I know—I must know—that it may have various possible positions. I know too that I couldn't give a definite number of all such positions. I do not know in advance how many positions "I could distinguish". (PG, p.261)

It seems plausible that, in the *Tractatus*, Wittgenstein would have held that spatial coordinates are objects, that is, elements of representation that correspond to simple names. Yet he now acknowledges that if we give a general description of a spatial state of affairs of the form, 'there is a space inside the square in which a circle is located', there is no possibility of enumerating all the propositions that are values of the propositional function 'a circle is located at the co-ordinates . . .'. A complete specification of all the positions at which a circle might be located simply makes no sense. Although we can describe any particular position in which a circle is located, the idea of describing all possible positions in which it might be located is nonsensical. In this case the fact that ' $(\exists x, y)(x, y$ are the co-ordinates of a position inside the square at which a circle is located)' follows from 'At co-ordinates a, b a circle is located', is not because the latter proposition is part of (included in) the sense of the former. In this case, the general proposition does not have the same sense as a disjunction of determinate set of elementary propositions, and Wittgenstein's suggested analysis of the general proposition is incorrect. Clearly, the fundamental problem here is not simply Wittgenstein's treatment of generality, but his conception of analysis, of determinacy of sense, and his commitment to the idea that if one proposition entails another, then the sense of the latter must be contained in (i.e. be part of) the sense of the former.

5. Wittgenstein's problematic treatment of generality is clearly essential to the idea that language is a single, unified calculus, and thus to the possibility of expressing the general form of a proposition as the general form of a truth-function: $[\bar{p}, \bar{\xi}, N(\bar{\xi})]$. The general form of a proposition assumes, not only that $N(\bar{\xi})$ operates exclusively on classes of elementary propositions and does not also occur as a constituent in complex functions, but that a given

function, Fx , does have a determinate class of propositions as values, that is, that there is an equivalence between determining a class of propositions by means of a function and enumerating them. Wittgenstein, as we've seen, holds that the general form of a proposition expresses what all propositions have in common: 'The general propositional form is the essence of a proposition' (*TLP* 5.471).

At *TLP* 5.4711, Wittgenstein writes:

To give the essence of a proposition means to give the essence of all description, and thus the essence of the world.

Thus, everything that is essential to the representation of states of affairs is expressed in the general form of a proposition. The general form of a proposition expresses the logical order that is essential to any system within which states of affairs are represented. Insofar as the logical order of a system of representation that is projected onto reality essentially mirrors the logical order of what is projected, we can think of the logical order that is expressed in the general form of a proposition as the logical order, or essence, of the reality that is represented. It is what language and the reality it represents essentially have in common, that is, it is that without which there is no representation of reality. Insofar as it expresses everything that we can say a priori about a system of representation that stands in a projective relation to the world, Wittgenstein believes that the general form of a proposition constitutes the one and only logical primitive:

The description of the most general propositional form is the description of the one and only general primitive sign in logic. (*TLP* 5.472)

The general form of a proposition expresses the essence of a proposition, that is, what all propositions that represent states of affairs have in common. It is given as soon as a language in which we express judgements about the world is given. In acquiring language we have already grasped the general form of a proposition, that is, we have already grasped the whole of logic, the essence of representation as such.

6. At *TLP* 5.473, Wittgenstein repeats the remark that is expressed at the beginning of the *Notebooks*; 'Logic must take care of itself.' How does Wittgenstein's recognition of the general form of a proposition as the one and only logical primitive show that logic takes care of itself? Wittgenstein's fundamental aim has been to show that there is a single variable that expresses what all

propositions have in common. This variable expresses everything that can be said a priori, ‘without more ado’, about the logical structure of a language in which thoughts are expressed. It expresses what is *absolutely* essential to a method of projecting language onto the world. It is concerned with what is essential to how symbols symbolize, and not with what symbols signify. Thus, it has been made clear that what is essential to the representation of reality belongs to the method of projecting signs onto reality; it concerns what is essential to language’s signifying in the way that it does; it says nothing about what signs signify and thus it cannot be expressed in a proposition that can be compared with reality for truth or falsity. What is essential to the method of projecting language onto reality—i.e. to representation—is prior to truth or falsity.

The question whether a particular sign has been given a meaning is, therefore, *only* a question whether a certain sort of projection onto reality has been made. Any sign that can be projected onto reality is also capable of signifying: ‘If a sign is possible, then it is also capable of signifying’ (*TLP* 5.473). There is, in other words, no further question whether a state of affairs is represented by a propositional sign over and above the question whether the propositional sign has a place in a system of representation that stands in a projective relation to the world, that is, whether it is a value of the general form of proposition. Thus, we cannot give a sign a sense and *then* ask whether it occurs in propositions that represent states of affairs: the method by which any sign gets a sense is the method of projecting propositions in which it occurs onto reality. The projection of the propositional signs in which it occurs onto reality is what gives a sign its sense, and there is nothing independent of that projection that determines whether a sign is legitimate or illegitimate. Thus, in making it clear that logic does not represent, Wittgenstein is making it clear that logic—everything that is essential to the representation of reality—is not grounded in reality, but in what is essential to the method of projection in virtue of which a comparison between language and reality becomes possible. It is making clear that ‘[I]n a certain sense, we cannot make mistakes in logic’: logic is what is prior to all mistakes.

Thus, Wittgenstein makes the appeal to self-evidence in logic redundant:

What makes logic a priori is the *impossibility* of illogical thought. (*TLP* 5.4731)

What this amounts to, as we’ve just seen, is that logic is everything that is essential to the method of projection by which signs come to figure in propositions that express thoughts about reality. Whether a sign has a sense depends

only upon whether the projection has been made; the projection's being made is what constitutes the sense of a sign. Thus:

We cannot give a sign the wrong sense. (*TLP* 5.4732)

A sign has sense insofar as it is used in a system of representation that stands in a projective relation to the world. If a sign has a use in propositions with sense (i.e. in propositions that can be compared with reality for truth or falsity), then it has a sense (meaning). Signs that have the same use are the same symbol, and signs that have no use are meaningless.

7. Wittgenstein now goes on to express his disagreement with a view he attributes to Frege:

Frege says that any legitimately constructed proposition must have a sense. And I say that any possible proposition is legitimately constructed, and, if it has no sense, that can only be because we have failed to give a *meaning* to some of its constituents. (*TLP* 5.4733)

The reference of Wittgenstein's remark is to §32 of *The Basic Laws of Arithmetic*:

In this way it is shown that our eight primitive names have denotation, and thereby that the same holds good for all names correctly compounded out of these. However, not only a denotation, but also a sense, appertains to all names correctly formed from our signs. Every such name of a truth-value *expresses* a sense, a *thought*. (Frege, 1964, §32, p.50)

The implication of this remark is that the concept of what a sign signifies is prior to, and independent of, the concept of the sense of propositions in which the sign occurs. The suggestion is that *if* the constituent expressions of a sentence have denotation, *and* those expressions have been correctly conjoined, *then* the resulting expression expresses a sense. However, this is in apparent tension with Frege's commitment to the context principle, which he expresses as follows:

It is enough if the proposition taken as a whole has a sense; it is this that confers on its parts also their content. (Frege, 1980, §60, p.71)

Wittgenstein's disagreement with Frege amounts to a reassertion of the context principle, and thereby of the priority of the concept of the sense of a proposition over that of what the constituents of a proposition signify. If a propositional sign expresses a sense, then the signs that are its logical

constituents have a meaning, are correlated with an object. The constituent expressions have a meaning—stand for an object—simply insofar as they make a contribution to the sense of propositions in which they occur. If a propositional sign fails to express a sense, then this can only be because we have failed to make the projection that constitutes the meaning of a sign, that is, we have failed to determine how the sign is used in propositions that can be compared with reality for truth or falsity. There is no notion of the meaning of a sign—of what a sign signifies—that is prior to this act of determination of the sense of propositions in which a sign occurs. It is by giving a sign an application in propositions with sense that we confer meaning on it, that it comes to signify an object. If a propositional sign lacks sense, then that can only be because we have failed to determine how one of its constituents contributes to the sense of propositions.⁴

8. At *TLP* 5.552, Wittgenstein writes:

The ‘experience’ that we need in order to understand logic is not that something or other is the state of things, but that something *is*: that, however, is *not* an experience.

Logic is *prior* to every experience—that something *is so*.

It is prior to the question ‘How?’, not prior to the question ‘What?’

At the end of Chapter 6, we looked at remarks in the *Notebooks* in which Wittgenstein describes his rejection of Russell’s conception of the task of philosophy. He objects to the Russellian questions ‘Does the subject–predicate form exist? Does the relational form exist?’ (*NB*, p.2), on the grounds that what they ask ‘would have to be shown by means of some kind of experience, and that I regard as out of the question’ (*NB*, p.3). What he has now made clear is that logic does not depend upon anything’s being so, but is internal to the expression of thoughts that are true or false. It has to do, in other words, not with what *is* the case, but with the possibility of something’s being the case, that is, with the possibility of comparing propositions with reality for truth or falsity. It is prior to the question how things are in the world, but it is not prior to the existence of propositions with sense, or of

⁴ cf. Diamond’s remark: ‘for Wittgenstein there is *no* kind of nonsense which is nonsense on account of what the terms composing it mean—there is as it were no “positive” nonsense. *Anything* that is nonsense is so merely because some determination of meaning has *not* been made’ (Diamond, 1981/1991a, p.106). I am clearly in agreement with Diamond and Conant not only in finding this view of nonsense present in the *Tractatus*, but in recognizing that it is central to Wittgenstein’s commitment to a version of Frege’s context principle. However, I diverge from them in not making a contrasting conception of nonsense—the idea that a sentence may be nonsense because of the meaning of the words occurring in it—a central target of the work.

simple signs with meaning: it is not prior to the possibility of our laying language ‘against reality like a measure’, to the possibility of our determining what is the case. Logic has no content (it is prior to the question ‘How?’), but it presupposes, in the sense that it is cotemporaneous with, the existence of expressions with content that can be compared with reality for truth or falsity (it is not prior to the question ‘What?’). Logic is not independent of something’s being represented, but it is independent of the truth or falsity of any representation.

Wittgenstein goes on:

And if this were not so, how could we apply logic? We might put it this way: if there would be a logic even if there were no world, how then could there be a logic given that there is a world? (*TLP* 5.5521)

If logic were not internally connected with the representation of states of affairs, then how could we apply logic in the expression of propositions with sense, and in making inferences from one proposition to another. If logic had its own content, which must be compared with reality for correctness or incorrectness, then how could we ever get so far as applying logic? We would need to establish that logic is correct before it is applied, and how could that be done? All our methods of comparison employ logic. If we could construct forms with no idea whether there is anything that corresponds to them, how could we ever arrive at a logic that is guaranteed to fit the world. To do so we would have to be able to describe the world without presupposing logic and, at the same time, show that our logic fits it. Wittgenstein’s idea is that we can understand how logic applies to the world only if the world and logic are reciprocal notions: there is no representation of the world without logic and there is no logic without representation of the world. And this can be so only insofar as we recognize that logic does not have a subject matter; it does not depend on something’s being so; it is prior to truth and falsity; it does not constitute a body of doctrine. The necessary applicability of logic is intelligible only insofar as logic constitutes the essence of empirical representation: it is by means of logic that states of affairs are represented.

Wittgenstein takes up the point again at *TLP* 5.557:

The *application* of logic decides what elementary propositions there are.

What belongs to its application, logic cannot anticipate.

It is clear that logic must not clash with its application.

But logic has to be in contact with its application.

Therefore logic and its application must not overlap.

What elementary propositions there are is not something that can be settled a priori. It depends upon the application of logic in propositions that represent states of affairs; we have to look at the use of language in order to determine what elementary propositions there are. However, it is clear that logic cannot clash with its application in propositions that describe states of affairs. That is to say, there cannot be illogical thoughts. Logic is what is essential before any proposition can be compared with reality, that is, it is what is essential to representation as such. Insofar as there exists a system of representation within which propositions that are either true or false are expressed, the whole of logic must already be in place. Thus, logic and its application cannot be separated from one another: there is no logic without thoughts that represent the world; there are no thoughts that represent the world without logic. Logic does not exist prior to the representation of the world, and representation of the world does not exist without the existence of logic.

9. At *TLP* 6.1, Wittgenstein turns his attention to the status of the propositions of logic:

The propositions of logic are tautologies.

The significance of this remark cannot be detached from the logical investigation that has preceded it, in which the relation between tautologies and elementary propositions, and the internal relation between propositions that grounds the inference from one to the other, has been made perspicuous. Thus, it has been made clear what the nature of a tautology is. A tautology is essentially a complex proposition that is constructed from its bases by means of the truth-operations in such a way that all representational relations to reality have been cut. The senses of the elementary propositions that are the atoms of a tautology play no role in determining the truth-conditions of the resulting proposition, for the resulting proposition is true come what may. Thus, it has been made perspicuous that 'the propositions of logic say nothing' (*TLP* 6.11); that is to say, they do not represent. The propositions of logic have a unique status among other propositions: they are constructed in the same way as all other propositions, namely by means of truth-operations on elementary propositions, but in such a way that they do not 'determine reality in any way' (*TLP* 4.463). A tautology is part of the symbolism, but a part in which symbols no longer symbolize, that is, they no longer characterize the sense of the proposition that has been constructed by means of them. It is essential to a tautology that the symbols from which it is constructed have a sense, but this sense plays no essential role in the symbol.

Wittgenstein's investigation of the essence of logical portrayal thus serves to make perspicuous both the relation between a molecular proposition and its atoms and the relation between the propositions of logic and elementary propositions. We can now see clearly that the concept of self-evidence is irrelevant for logic. The truth of the propositions of logic is a result of the form of the symbol alone, that is, of the way it has been constructed, and does not depend upon anything's being the case. Thus:

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 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 proposition alone. (*TLP* 6.113)

That is to say, the fact that we can recognize the truth of the propositions of logic from the symbol alone already shows that these propositions have no content, that they do not represent states of affairs. The truth or falsity of a proposition with content—i.e. a proposition with sense—cannot be recognized from the symbol alone; it is only by comparing the proposition with reality that its truth or falsity is determined. Wittgenstein believes that he has merely succeeded in making clear what language itself already makes clear, although we didn't initially see it clearly. It is not that Wittgenstein is forced into calling the propositions of logic senseless because they fail his criterion for being a proposition (true–false poles). It is rather that in making the senselessness of tautologies perspicuous, Wittgenstein has succeeded in clarifying the unique status of the propositions of logic. In the same way, he has made clear that the significance of these propositions does not lie in their expressing general truths about the world.

Wittgenstein now goes on to make clear what the significance of tautologies is:

The fact that the propositions of logic are tautologies *shows* the formal—logical—properties of language and the world.

The fact that a tautology is yielded by *this particular way* of connecting its constituents characterizes the logic of its constituents.

If propositions are to yield a tautology when they are connected in a certain way, they must have certain structural properties. So their yielding a tautology when combined *in this way* shows that they possess these structural properties. (*TLP* 6.12)

The significance of tautologies is that they make perspicuous the internal relations between forms of proposition. Thus, although all tautologies say the same thing, namely nothing, they show different things, namely, the logical

relations between different forms of proposition. Michael Kremer makes the point as follows:

[T]he tautology “ $\neg(p \& \neg p)$ ” shows that the propositions p and $\neg p$ contradict one another, while the tautology “ $((p \& (p \rightarrow q)) \rightarrow q)$ ” shows that q follows from p and $p \rightarrow q$. Thus, these two tautologies, while not differing in sense, differ in what they *show*. (Kremer, 2002, pp.275–6)

Internal relations between propositions—i.e. between p and $\neg p$ and between p and $p \rightarrow q$ and q —are, as we’ve seen, intrinsic to the system of representation to which propositions essentially belong and which constitutes them as the propositions they are. The whole of logical space is given with the system of representation. Tautologies show the structural relations between propositions in logical space, by combining propositions in such a way that the truth of the resulting proposition is determined by its structure, independently of the sense of the constituent propositions.

Wittgenstein spells out the point as follows:

For example, the fact that the proposition ‘ p ’ and ‘ $\neg p$ ’ in the combination ‘ $\neg(p, \neg p)$ ’ yield a tautology shows that they contradict one another. The fact that the propositions ‘ $p \rightarrow q$ ’, ‘ p ’ and ‘ q ’, combined with one another in the form ‘ $((p \rightarrow q).p) \rightarrow q$ ’, yield a tautology shows that q follows from p and $p \rightarrow q$. The fact that ‘ $(x)(fx) \rightarrow fa$ ’ is a tautology shows that fa follows from $(x)fx$. Etc. etc. (*TLP* 6.1201)

It is clear from this that Wittgenstein does not regard the propositions of logic as equivalent to universally quantified propositions: $(p)(\neg(p \& \neg p))$. Wittgenstein has completely rejected Frege and Russell’s treatment of the quantifiers. A general proposition, for Wittgenstein, essentially contains a propositional function that determines a class of elementary propositions; the sense of the general proposition is a truth-function of the propositions that are the members of this class, for example, of the class Fa, Fb, Fc , and so on. There are, therefore, no general propositions about propositions. The variables that he employs in *TLP* 6.1201 are not the basis of a generalization, but are used to express what is common to all propositions that are constructed in a particular way by means of the truth-operations. The sign for generality plays no role in the propositions of logic. The generality that logic expresses is the generality of logical form, which is expressed by means of a variable, not the accidental generality of logical product and logical sum, which is expressed by means of the sign for generality.

Wittgenstein goes on:

The mark of a logical proposition is *not* general validity.

To be general means no more than to be accidentally valid for all things. An ungeneralized proposition can be tautological just as well as a generalized one.

The general validity of logic might be called essential, in contrast with the accidental general validity of such propositions as ‘All men are mortal’. (*TLP* 6.1231–6.1232)

What distinguishes the propositions of logic is that their truth can be determined by inspection of the symbol. For these purposes, ‘It is raining or it is not raining’, ‘It is snowing or it is not snowing’ count as propositions of logic. However, what the propositions have in common, in virtue of which each is a tautology, is the structure ‘ $pv-p$ ’, that is, something that can be shown by means of a variable. A particular instance of a proposition of this form is not a logical truth in virtue of being a substitution instance of a general logical law, $(p)(pv-p)$, but simply in virtue of the way it is constructed, that is, simply in virtue of its having the form $(pv-p)$. Thus, that ‘It is raining or it is not raining’ is a proposition of logic is something that can be determined directly on the basis of the symbol itself, simply by recognizing the formal relation between the molecular proposition and its bases.

10. One of Wittgenstein’s criticisms of Frege and Russell’s universalist conception of logic is that it conceives the task of logic to be one of setting out the substantive laws that justify our moving from one proposition that is accepted as true to another. We saw in the previous chapter that Wittgenstein uses his clarification of the nature of a proposition to show that there is no need to ground the inference from one proposition to another in general ‘laws of inference’. An inference from one proposition, p , to another proposition, q , is shown to be justified by the internal relation that p and q have to one another—the sense of q is contained in the sense of p —and does not depend upon the existence of a law that connects them. We can now see how Wittgenstein’s investigation of the nature of inference and the nature of tautologies makes the relation between the propositions of logic and the practice of inference perspicuous. The propositions of logic make the logical properties of propositions clear by combining them in such a way that they say nothing. This explains why Wittgenstein holds that ‘one could achieve the same purpose by using contradictions instead of tautologies’ (*TLP* 6.1202). The internal relation between p and $-p$ is shown just as clearly by the fact that $p\&-p$ is a contradiction as by the fact that $pv-p$ is a tautology. In a perspicuous notation, the

internal relations between propositions, which are put on show in tautologies and contradictions, will be clear from the propositions themselves.

Thus, it becomes clear that the propositions of logic are superfluous: they do not ground the inference from one proposition to another. It is the internal relation between the propositions themselves that grounds the deduction of one from the other, and in a suitable notation this will be clear from the propositions themselves:

It follows from this that we can actually do without logical propositions; for in a suitable notation we can in fact recognize the formal properties of propositions by mere inspection of the propositions themselves.

If, for example, two propositions ' p ' and ' q ' in the combination ' $p \rightarrow q$ ' yield a tautology, then it is clear q follows from p .

For example, we see from the two propositions themselves that ' q ' follows from ' $(p \rightarrow q).p$ ', but it is also possible to show it in *this* way: we combine them to form ' $((p \rightarrow q).p) \rightarrow q$ ', and then show that this is a tautology. (*TLP* 6.122–6.1221)

Wittgenstein goes on:

This throws some light on the question why logical propositions cannot be confirmed by experience any more than they can be refuted by it. Not only must a proposition of logic be irrefutable by any possible experience, but it must also be unconfirmable by any possible experience. (*TLP* 6.1222)

What has become clear is that the propositions of logic do not assert anything. They put the formal properties of the symbolism, in virtue of which it signifies possible states of affairs, on show. No experience is needed either to confirm or disconfirm a logical proposition. Nothing is arranged experimentally in a proposition of logic; only the formal properties of the symbol play a role in determining its truth. Thus, '[o]ne can calculate whether a proposition belongs to logic, by calculating the logical properties of the *symbol*' (*TLP* 6.126). This in turn makes perspicuous the difference between a proof in logic and a proof of a proposition with sense. All we are doing in deriving one proposition of logic from other propositions of logic is constructing further tautologies from propositions that are already recognized as tautologies, by means of 'rules that deal with signs', rather than with what signs signify. All it amounts to 'is merely a mechanical expedient to facilitate the recognition of tautologies in complicated cases' (*TLP* 6.1262). Nothing is achieved by means of the proof that could not have been achieved by direct inspection of the proposition that is proved: 'In logic process and result are equivalent' (*TLP* 6.1261). There are no discoveries in logic, for 'it is

always possible to construe logic in such a way that every proposition is its own proof' (*TLP* 6.1265): 'Every tautology itself shows that it is a tautology' (*TLP* 6.127).

By contrast, the proof of a proposition with sense from propositions with sense that have already been accepted as true establishes something that could not have been established purely by inspection of the proved proposition. The proof of q from $p \rightarrow q$ and p depends upon 'rules that deal with signs', rather than with what signs signify, that is, it depends upon the internal relation between q and $(p \rightarrow q) \& p$. Thus, what we derive from $(p \rightarrow q) \& p$ is, as we've seen, already contained in the sense of $(p \rightarrow q) \& p$, and it is in virtue of this that its truth can be established on the basis of the truth of the latter. When we infer q from $(p \rightarrow q) \& p$, we come to know q indirectly, on the basis of knowing $(p \rightarrow q) \& p$: 'A proposition that has sense states something, which is shown by its proof to be true' (*TLP* 6.1264). By contrast, as we've just seen, proof is inessential in logic: 'In logic every proposition is the form of a proof' (*TLP* 6.1264). Every proposition of logic puts us in a position to recognize its truth on the basis of the internal properties of the proposition itself. A proposition of logic cannot be inferred from other propositions of logic, in the sense in which one proposition with sense can be inferred from other propositions with sense, for whatever is established indirectly in logic, by means of a so-called proof, could equally be established directly, by examination of the proposition itself.

Thus, it also becomes clear that 'all the propositions of logic are of equal status: it is not the case that some of them are essentially primitive propositions and others are essentially derived' (*TLP* 6.127). The whole idea of starting with basic self-evident truths and deriving further logical truths from them is, Wittgenstein believes, now seen to be an error that depends upon the conflation between proof in logic and proof of non-logical propositions. Now that the status and nature of logical propositions has been made perspicuous, the distinction between proof in logic and proof of non-logical propositions has also become clear. This completes Wittgenstein's clarification of the unique status of the propositions of logic. He believes that his logical investigation of the essence of a proposition has succeeded in making clear that 'logic is not a body of doctrine' (*TLP* 6.13). Logic has nothing to do with how the world is; it does not express general truths; it has no subject matter. Its connection with the world lies in the fact that it presupposes the existence of propositions that express a sense. Logic concerns what is essential to

the representation of states of affairs, that is, what is essential to our method of projecting language onto reality. Insofar as the logical order of a system of representation that is projected onto reality essentially mirrors the logical order of what is projected, logic is 'a mirror-image of the world' (*TLP* 6.13). The form of the world is mirrored in the logical structure of a language in which thoughts are expressed. Thus, when Wittgenstein remarks that '[l]ogic is transcendental' (*TLP* 6.13), he is to be understood as giving expression to his recognition of its status as the essence of representation: logic is not concerned with how things are in the world, but presents what is essential to any system of representation in which possible states of affairs are represented.

11. These remarks bring us to the culmination of Wittgenstein's investigation of the nature of a proposition. I have tried to show that there is nothing in the investigation that amounts to an attempt to ground the logic of our language in something outside language. Insofar as Wittgenstein's investigation has been shown to be directed at investigating how language itself makes clear what is essential to its signifying in the way that it does, there is no claim that his remarks convey unsayable truths about the relation between language and reality. The investigation has been directed at clarifying how our symbols symbolize, something that is made clear in the use of symbols in propositions with sense. However, it is clear that this understanding of the nature of Wittgenstein's investigation is committed to holding that something positive is achieved by means of his remarks: the nature and status of the logical order of language, in virtue of which it represents states of affairs, has, Wittgenstein believes, been made clear. The question now arises whether this idea of the positive achievement of the *Tractatus* can be squared with the penultimate remark of the work:

My propositions serve as elucidations in the following way: anyone who understands me eventually recognizes them as nonsensical, when he has used them—as steps—to climb up beyond them. (He must, so to speak, throw away the ladder after he has climbed up it.)

He must transcend these propositions, and then he will see the world aright. (*TLP* 6.54)

On Diamond and Conant's interpretation, Wittgenstein is to be understood as claiming that a reader of his work has understood its author's philosophical aims insofar as he has recognized that the sentences that occur in it are strictly nonsensical. Conant writes:

The *Tractatus* aims to show that (as Wittgenstein later puts it) “I cannot use language to get outside language” (*PR*, 6). It accomplishes this aim by first encouraging me to suppose that I can use language in such a way, and then enabling me to work through the (apparent) consequences of this (pseudo)-supposition, until I reach the point at which my impression of there being a determinate supposition (whose consequences I have throughout been exploring) dissolves on me. . . . On this reading, first I grasp that there is something that *must* be; then I see that it cannot be said; then I grasp that if it cannot be said it cannot be thought (that the limits of language are the limits of thought); and then, finally, when I have reached the top of the ladder, I grasp that there has been no “it” in my grasp all along (that that which I cannot think I cannot “grasp” either). (Conant, 2002, pp.421–2)

Thus, the philosophical point of the work is that by the end of it the reader should have understood that Wittgenstein’s remarks fall apart when we try to give meaning to the signs that occur in them. The value of the lesson lies in the reader’s coming to see, by means of this recognition, that there is nothing that constitutes even so much as an attempt to get outside language and explain how it connects with the world; the very idea of such a perspective on language is an illusion. The outcome of the lesson is that we are no longer tempted to engage in this kind of nonsense: ‘we say nothing except what can be said’ (*TLP* 6.53)

The interpretation I’ve presented has tried to separate out the illegitimate idea of explaining how language connects with the world from the legitimate idea of allowing language itself to reveal how it functions. The idea of clarification, as it were from inside language, does not involve a necessarily doomed attempt to take up a perspective on language from a point outside. The distinction between what can be said in language and what shows itself does not, as I’ve interpreted it, concern thoughts that are expressible and thoughts that lie beyond our capacity to express them in language. Rather, it emerges, in the context of a logical investigation of how language functions, as a distinction between what a symbol signifies and the logico-syntactic properties in virtue of which it signifies what it does. The ideas, which on Conant’s account get thrown away at the end of the work, do not, on this interpretation, come into view at all.⁵ I have argued that the interpretation I’ve presented fits Wittgenstein’s claim that he is engaged in an activity of clarification, an activity of laying bare what language itself reveals. But how does the interpretation

⁵ Thus, ideas which Diamond and Conant believe represent stages in Wittgenstein’s construction of the ladder are, on the interpretation put forward here, simply misinterpretations of Wittgenstein’s text.

fit Wittgenstein's additional claim that the result of this activity of clarification is that we eventually recognize that his propositions are nonsensical? Is the idea that the remarks achieve a form of clarification compatible with Wittgenstein's demand that we come to recognize them as nonsensical? Is it correct to think that we can make sense of the idea that Wittgenstein achieves philosophical insights by means of propositions that are nonsensical, without committing ourselves to the idea that his remarks convey ineffable truths?

What has been clarified, according to the current interpretation, is the logical order of a language in which thoughts are expressed, something that is shown in how signs are used with a sense, and which we grasp in virtue of being masters of language. What we have become clear about is what is essential to the workings of language, and how what is essential shows itself in the use of signs to express thoughts about the world. Insofar as the clarity we've achieved concerns what is essential to a sign's expressing a sense, then it might be argued that the proper expression of what we thus clearly see is our simply using signs correctly, that is, in our saying nothing except what can be said. This allows us to acknowledge that, once Wittgenstein's remarks have achieved what they are intended to achieve, they can be completely left behind. His remarks are, in this sense, entirely transitional; they do not express propositions with sense, and nor do they convey truths that cannot be expressed in propositions with sense, but they serve to bring about a clarified vision of the logical order that—Wittgenstein believes—is there in language insofar as it represents states of affairs.

Thus, the work that Wittgenstein's propositions perform does not depend upon their possessing a sense, but upon their enabling the reader to see clearly what the use of language makes clear. If the propositions work as they are intended to, then the reader must transcend them, and express the insight into the way language functions that they have enabled him to achieve, by employing symbols correctly, in the expression of propositions with sense. There is no positive task for philosophy of the kind that Russell envisaged: the cataloguing of logical forms. Logic takes care of itself. If there is a task for the philosopher, then it is as a custodian of sense. The point of *TLP* 6.54 is that, if we have learned the lesson of the work, then we must now recognize that the remarks of the *Tractatus* itself, although they are not an attempt 'to say something metaphysical', do not express a sense, and are thus strictly nonsensical. The nonsense has indeed been useful, but not in the sense that it has conveyed truths about the relation between language and the world that cannot be said in language. Rather, in the sense that it has liberated us from the idea that

language's ability to signify in the way that it does depends upon a relation to something outside it; what is essential to language's signifying in the way that it does is internal to language, and shown in how propositions are used with a sense.⁶

⁶ cf. Conant's remark: 'The *Tractatus* aims to show that (as Wittgenstein later puts it) "I cannot use language to get outside language" (*PR*, 6)' (Conant, 2002, p.421). Although I have been at pains to articulate the differences between my interpretation and that of Conant and Diamond, there is clearly a fundamental sympathy between the two. It is not only that both interpretations belong to what I've been calling the 'anti-metaphysical' tradition, but also that my understanding of where the reader stands at the end of the work is clearly importantly similar to theirs. The differences lie in the account of *how* Wittgenstein's aim is achieved, rather than in our understanding of what the aim is. On my interpretation, it is achieved by means of insights into how language functions (i.e. into the nature of a proposition and the nature and status of logic); for Conant and Diamond it is achieved by means of a critique of Wittgenstein's own metaphysical-sounding remarks: 'the "philosophical propositions" we come out with when we attempt to frame [philosophical] thoughts are to be recognized as *Unsinn*' (Conant, 2002, p.423). On neither interpretation is it held that 'in the course of the book, Wittgenstein asserts many different kinds of truths that *stricto sensu* cannot be said, but that are held to show themselves in features of the symbolism' (Hacker, 2001a/2001b, p.146).

Logic and Solipsism

1. The insights concerning the status of logic in the early 6s, discussed in the previous chapter, are undoubtedly the culmination of Wittgenstein's investigation of the nature of a proposition. However, immediately prior to these summary remarks on the status of logic there is a set of remarks on solipsism, which also appear to have something of the status of a denouement. The sense that the remarks on solipsism constitute some form of climax to what has gone before is reinforced by the fact that, in these remarks, Wittgenstein returns, in what appears to be a tone of resolution, to the issue of the limit of thought, which in the preface he had described as the central topic of the book:

The whole sense of the book might be summed up in the following words: What can be said at all can be said clearly, and what we cannot talk about we must pass over in silence.

Thus, the aim of the book is to draw a limit to thought, or rather—not to thought, but to the expression of thoughts: for in order to be able to draw a limit to thoughts, we should have to find both sides of the limit thinkable (i.e. we should have to be able to think what cannot be thought).

It will therefore only be in language that the limit can be drawn, and what lies on the other side of the limit will simply be nonsense. (*TLP*, p.3)

The explicit return to these ideas in the remarks on solipsism suggests that it is at this point in the work that Wittgenstein believes that what he set out as the aim of the work—to draw a limit to the expression of thoughts—has been achieved. The sense is that the nature and status of this limit can, at this point, be made perspicuous. The remarks of the preface make it clear that the limit Wittgenstein is concerned to clarify cannot be conceived as separating thoughts that have sense from thoughts that lack sense: a thought is a proposition with sense. The limit Wittgenstein is concerned with has to be conceived as the limit of the expression of thought: the limit of what can be said. The limit of what can be said is not a boundary that separates senses that have sense

from senses that do not have sense. It is the boundary between signs that have a projection onto reality and signs that do not. What lies on the far side of this boundary is simply nonsense. The idea is that by the time he arrives at the remarks on solipsism, Wittgenstein believes that he has made the nature and status of this boundary clear. If this is correct, then it suggests that we should see the remarks on solipsism as expressing the fundamental insight concerning the nature and status of the limit of thought—or of the expression of thought—that it is the principal aim of the work to achieve.

2. Before I go on to discuss the philosophical significance of Wittgenstein's remarks on solipsism, it is worth pausing briefly to consider the history of Wittgenstein's interest in the topic and of the inclusion of remarks on it in material that is eventually published as the *Tractatus*. In his paper, 'Solipsism' (McGuinness, 2001/2002), Brian McGuinness sets out the early history of Wittgenstein's remarks. He points out that a letter from Russell to Ottoline Morrell makes it clear that Wittgenstein had discussed the topic with Russell as early as April 1912. However, the remarks on solipsism that appear in the *Tractatus* were added to the text of the *Prototractatus*, McGuinness suggests, only after Wittgenstein had completed a draft of the remarks on the nature of a proposition, written, according to McGuinness, during the period July 1915–April 1916, when there is a break in entries to the *Notebooks*.

The topic of solipsism comes to dominate remarks in the *Notebooks* in June 1916, although the theme is first introduced in the *Notebooks* in May 1915, and the topic had been the subject of coded remarks some time before that. According to McGuinness's account, the date of the appearance of the remarks on solipsism in the text of the *Prototractatus* corresponds to the date from which related remarks begin to dominate the entries in the *Notebooks*, that is, June 1916. McGuinness thinks that Hacker is therefore correct when he suggests that Wittgenstein's ideas on solipsism are introduced only after his logical investigation of the nature of a proposition is completed. It is clear, however, that the lateness of the appearance of the remarks on solipsism does not in any way detract from their significance. McGuinness suggests that, in these remarks, '[i]t is as if he had bridged—or was about to bridge—some gap between his philosophy and his inner life' (McGuinness, 1988, p.245; quoted in Peter Sullivan (Sullivan, 1996, p.200)). This may well be the case. However, it is also the case that Wittgenstein, as I just remarked, appears to believe that in making a connection between his logical investigation of the nature of a proposition and the topic of solipsism, he succeeds in giving

expression to the fundamental insight concerning the limit of thought that is the central aim of the work.

The remarks on solipsism that are linked together in the *Tractatus*, as *TLP* 5.6–5.641, do not appear together as a single, continuous set of remarks prior to their appearance in the *Tractatus*. The first remarks on solipsism to appear in the *Notebooks*, in May 1915, occur in the *Tractatus* as *TLP* 5.6, 5.62(1), and 5.631(2). All the remaining remarks that appear in the *Tractatus*, apart from *TLP* 5.61, are anticipated in remarks that follow the reintroduction of the topic in the *Notebooks* in June 1916. In the *Prototractatus*, Wittgenstein selects, from the latter remarks, all the remarks that will eventually occur in the *Tractatus*; these remarks occur in the *Prototractatus* as *PTLP* 5.335–5.33552, but the set still does not include *TLP* 5.61. *TLP* 5.61 does occur in the *Prototractatus*, as *PTLP* 5.40410–5.4043, but it is placed after the remarks on solipsism, and it is separated from them by remarks on the status of logic. In the *Prototractatus*, *TLP* 5.61 occurs as a direct comment on the remarks on logic discussed in Chapter 10 (*TLP* 5.553–5.5542), in which Wittgenstein explicitly rejects Russell's conception of the task of philosophy as one of specifying what logical forms there are.

The context of *TLP* 5.61 in the *Prototractatus*, together with its eventual inclusion in the section of the *Tractatus* on solipsism, makes it clear that Wittgenstein sees a close connection between his response to solipsism and his rejection of Russell's conception of the task of philosophy. In the case of the latter, the move away from Russell comes with Wittgenstein's recognition that the relation between logic and the world is an internal relation: logic does not exist prior to, or independently of, the representation of the world; and the representation of the world does not exist without logic. The world and logic are, in this sense, reciprocal notions. By interpolating these insights into his remarks on solipsism, Wittgenstein, I want to argue, intends to provide us with the key to his understanding of the truth in solipsism, and of the relation between the subject and the world.

3. The topic of solipsism is one that remains a central focus of investigation in the years following Wittgenstein's return to philosophy in 1929. In the discussion of the topic in the early 1930s, his remarks continue to address the question, central to the remarks in the *Tractatus*, of the comparison between the thinking subject's relation to the world and the form of the visual field, but they also expand the investigation to include the question of the nature and status of first-person ascriptions of sensations, and of

first-person/third-person asymmetry. This expansion of the discussion of solipsism to include the subject of bodily sensation, as well as the thinking or representing subject, is, as McGuinness notes, one that is made explicitly only in the post-*Tractatus* writing. This is not, of course, to suggest that what Wittgenstein says about solipsism and the thinking subject in the *Tractatus* does not have immediate application to the subject of bodily sensations, or that the later development of the topic is not in some way already implicit in the ideas of the *Tractatus*. However, it seems that McGuinness is right in suggesting that the focus of the remarks in the *Tractatus* is narrower than that of Wittgenstein's subsequent discussion of solipsism. In the remarks in the *Tractatus*, he appears to be concerned exclusively with the question of the relation between the thinking subject and the world; it is only later that he extends what he says about the subject of outer experience to the subject of inner experience.

4. I've already suggested that the context in which *TLP* 5.61 occurs in the *Prototractatus* makes it clear that this remark is, in part at least, a response to Russell's conception of the task of philosophy. Cora Diamond has argued more generally that, although Russell is not explicitly mentioned in *TLP* 5.6–5.641, the whole of Wittgenstein's discussion of solipsism is a critical response to Russell's treatment of the topic. There is, of course, no doubt that Wittgenstein was familiar with Russell's views. He had, as McGuinness notes, discussed the topic with Russell on a number of occasions and, in a letter written around Christmas-time 1914, Wittgenstein thanks Russell for sending him his 'piece about sense-data'. This must be a reference to Russell's paper, 'The Relation of Sense-Data to Physics', in which Russell discusses the relation between the subject and the world. The interpretation of Wittgenstein's remarks on solipsism that follows owes a great deal to Cora Diamond's discussion, although I want to make much more of Wittgenstein's sympathy with solipsism than she is inclined to. Thus, I do not want to read the remarks, as she does, as expressing no philosophical insight over and above the exposure of the incoherence of Russell's response to solipsism. I shall argue that Wittgenstein does indeed believe that there is a truth in solipsism. That is to say, he believes that there is a fundamental insight expressed by solipsism, which his investigation into the nature and status of logic enables him to make clear. Moreover, I believe that this insight continues to be the basis of his later philosophy. However, the claim of Diamond's from which my interpretation starts is that we should read Wittgenstein's remarks on solipsism as a rejection

of Russell's conception of the relation between the subject and the world. I will begin, therefore, by saying something about Russell's view of this relation.

5. Both Russell's view of the subject and his conception of the intersubjective world are in a state of development during the period we are concerned with. However, there is a stable core of ideas that remains the basic starting point for his reflections throughout. First of all, he is committed to the idea that the only particulars with which we are acquainted are our own private sense-data. Sense-data are private to each person, so that what is immediately present to, say, the sight of one individual cannot be immediately present to the sight of another. By definition, sense-data exist only while they are being perceived. However, Russell argues, it does not follow from this that sense-data are themselves mental items. The act by which a sense-datum is apprehended is certainly mental, but it does not follow that what is apprehended is mental. In general, Russell wants to claim, against the idealists, that although sense-data are necessarily present to, or before, an individual mind, they are not 'in' the mind, but rather 'stand over against the subject as the external object of which in sensation the subject is aware' (Russell, 1914/1986, p.9).

Secondly, Russell thinks that we are not only aware of sense-data, but also aware of being aware of them. When, for example, I see the sun, he argues, I am aware not only of the sun, but also of my seeing the sun. Thus, 'my seeing the sun' is, Russell believes, a complex with which I am immediately acquainted through introspection. In the case of human beings, as opposed to animals, all awareness of sense-data is, at the same time, an immediate, self-conscious awareness of oneself as aware of these sense-data. Russell is, however, equivocal on whether we have anything that amounts to an immediate acquaintance with our bare selves. He accepts that when we turn our attention inwards in introspection, we are aware only of particular thoughts or feelings, and not of the self that has them. However, he argues that in being aware of a particular thought or feeling—say of my seeing the sun—I am necessarily acquainted with two different things in relation to each other. On the one hand, there is the sense-datum which represents the sun to me, and on the other, there is that which is acquainted with that sense-datum. What I am acquainted with is 'self-acquainted-with-sense-datum'.

Thus, in *Problems of Philosophy* (1912), he writes:

When I am acquainted with 'my seeing the sun', it seems plain that I am acquainted with two different things in relation to each other. (Russell, 1980, p.26)

In 'The Relation of Sense-Data to Physics', written two years later, he still maintains that when I am acquainted with a sense-datum, I am acquainted with two things standing in an external relation to one another:

sense gives acquaintance with particulars, and is thus a two-term relation in which the object can be *named* but not *asserted*. (Russell, 1914/1986, p.6)

Russell recognizes that, by accepting that each person, so far as his sense-data are concerned, lives in a private world, he is forced to concede the logical possibility that 'the world consists of myself and my thoughts and feelings and sensations, and that everything else is mere fancy' (Russell, 1980, p.10). His response to this solipsistic threat is to argue that, although it 'is not logically impossible, there is no reason whatever to suppose that it is true' (Russell, 1980, p.10). As Russell understands it, therefore, the challenge that solipsism poses is to provide good reason to accept that the world is more extensive than my private world of sense-data, that is, that we have good reason to believe that there are particulars with which we are not immediately acquainted, and which constitute the neutral 'things' of common sense and physics. In the period we're concerned with, Russell's conception of how to approach the task of moving from the private world of an individual subject's sense-data to the neutral public world of physical objects undergoes an important development, in which he replaces the idea of physical objects as inferred entities, the view he holds in the *Problems of Philosophy* (1912), with the idea of physical objects as logical constructions, the view he holds in 'The Relation of Sense-Data to Physics' and in *Our Knowledge of the External World* (both 1914).

However, even in his constructive phase, Russell concedes that he cannot dispense altogether with inferred entities, that is, with particulars with which we are not acquainted. He accepts, in other words, that there is no possibility of constructing physical objects from a solipsistic base. Rather, in moving to the construction of physical objects, Russell is able to restrict the entities whose existence he is forced to infer to other minds, to the sense-data of others, and to sensibilia, where 'sensibilia' are defined as 'objects which have the same metaphysical and physical status as sense-data, without necessarily being data to any mind' (Russell, 1914/1986, p.7). Thus, once he makes the shift to the logical construction of physical objects, all inferred entities have a "similar" ontological status to the objects with which we are acquainted, and are no longer 'wholly remote from the data which nominally support the inference' (Russell, 1914/1986, p.12).

Russell's distinction between knowledge by acquaintance and knowledge by description is clearly crucial to his rejection of solipsism. The two-place relation of acquaintance, which forms the heart of Russell's conception of the relation between the subject and the world, is an immediate cognitive relation, independent of knowledge of truths, between a mind and an object. The objects with which the mind is immediately acquainted comprise a restricted set of particulars—its own sense-data, its own memory-data, and *possibly* the self—plus universals of varying degree. This doctrine of acquaintance is central to Russell's conception of analysis. Thus, he holds that all the propositions that are intelligible to a given subject are composed wholly of constituents with which the subject is acquainted; if a proposition contains a constituent with which the subject is not acquainted, then that proposition is simply unintelligible to him. The inferred entities that figure in Russell's account—other minds, the sense-data of others, physical objects (prior to 1914), or sensibilia (after 1914)—are, by definition, entities with which we are not immediately acquainted. Russell's fundamental idea is that we know of these inferred entities on the basis of knowing that there is a unique object that has some property or properties with which we are acquainted. In this case, we are said to have knowledge of that object by description, whether we are acquainted with it or not. In this way, Russell believes that he is able to resist the solipsist and show that we have good reason to accept that our knowledge extends, by means of descriptions, to a realm beyond our own private world of experience. Cora Diamond makes the point as follows:

Russell's idea that knowledge by description enables us to pass beyond the limit of our private experience could . . . be expressed this way: the limits of *the* world, about which I can have knowledge, and the objects which I can denote (directly or indirectly), lie outside the limits of my own experience. (Diamond, 2000, p.267)

6. The critical relation between Wittgenstein's response to solipsism and that of Russell is a complex one. First of all, it is clear that Wittgenstein would consider Russell's attempt to resist the solipsist's conclusion by showing that solipsism is false, and that we do have a good reason to believe that there is a world beyond the private world of our own sense-data, to be completely misconceived. Cora Diamond articulates what is, from the perspective of the *Tractatus*, one of the central confusions of Russell's response as follows. Russell's idea of how to avoid solipsism depends upon his conception of knowledge by description, in which we use quantifiers to assert the existence of a unique object possessing certain properties. Diamond points out

that Russell is here relying on the view that our understanding of the words 'some' and 'all' amounts to 'a *general* grasp of what it is for a property or relation to be instantiated in *some* or *all* cases' (Diamond, 2000, p.271). This permits Russell to hold that, although I cannot understand a proposition that has Bismarck's self or Bismarck's sense-data as constituents, I can understand a general proposition that is entailed by the propositions that I cannot understand. This conception of knowledge by description is, she argues, completely at odds with Wittgenstein's understanding of general propositions. For Wittgenstein, the sense of a general proposition is a truth-functional construction of all the propositions that are the values of the propositional function in which the generality sign occurs as an argument, and there is simply no sense to the idea that the general proposition and the particular propositions that entail it could belong, as Russell implicitly claims, to different languages. Diamond sums up the points as follows:

[For Wittgenstein] logical relations are relations between the sentences of the language which I understand; there is no coherent notion of a logical relation between a quantified sentence of my language and a sentence outside that language. If one claimed that there were such logical relations, one would have to gesture at the supposed incomprehensible sentence or sentences by a description or by quantification. And here one would be fooling oneself. What you can't think, you can't think, and you can't sneak up on it by quantifiers. (Diamond, 2000, p.274)

Diamond recognizes that Wittgenstein's critical response to Russell's views goes beyond the implicit rejection of his treatment of the quantifiers, which is central to Russell's attempt to avoid solipsism. Thus, she argues that a second important element in Wittgenstein's critique of Russell is a 'rejection of Russell's idea of acquaintance as a relation between a self or subject . . . and an object' (Diamond, 2000, p.276). It is this aspect of Russell's views that is the immediate focus for the remarks on solipsism and I simply want to follow Diamond in holding that we should understand these remarks as a response to the views of Russell. Thus, I want to argue that Wittgenstein sees Russell's response to solipsism as misconceived, not merely because it is, in the way that Diamond demonstrates, logically incoherent, but because it accepts as its starting point the solipsist's own problematic conception of the relation between the subject and his world. It is this starting point that needs investigation, for it is the real source of the philosophical confusion that Wittgenstein's investigation of the nature and status of logic permits him to diagnose and overcome.

7. What Wittgenstein sets out to show is that Russell's solipsistic starting point expresses a mistaken conception of the nature of the relation between the subject and the world. The correct approach to solipsism is not to oppose it, in the way that Russell (incoherently) attempts to do, by trying to show that there is a public world of neutral objects beyond the boundary of my private world. Rather, we need to clarify the nature of the relation between the subject and the world that the solipsist wants to insist upon; we need to make the nature of this relation itself a topic for philosophical elucidation. Once the relation between the subject and the world is seen in the right light, then, Wittgenstein believes, it becomes clear that 'when [solipsism's] implications are followed out strictly, [it] coincides with pure realism' (*TLP* 5.64). What we come to see is that the problem that Russell tries to solve by showing that there is a world beyond my world does not exist.

The features of Russell's starting point, which, on this interpretation, form the focus for Wittgenstein's critique, are as follows. Russell's principle of acquaintance conceives the relation between the subject and the constituents of his world as a two-place, external relation, which has the subject as one term and a sense-datum as the other. Russell tries to be non-committal on the question whether the subject persists through time, but he is inclined to believe that, even though it is difficult to discover any state of mind in which I am aware of my self alone, I nevertheless must be acquainted with my self. For otherwise, the word 'I' in propositions of the form, 'I am acquainted with *A*', would require definition, and it is hard to see how a definition could be anything other than circular: 'the subject-term in awareness of which *I* am aware'. Thus, he is led to consider the self as a particular existent with which I am "probably" acquainted. The external relation of acquaintance is thus used to draw a boundary round the constituents of the private world of each individual subject: the constituents of a particular subject's private world comprise whatever objects the subject stands in a relation of acquaintance to. For Wittgenstein's purposes, it does not really matter that Russell goes on to attempt to draw a second boundary outside the boundary that is defined by the external relation of acquaintance. The fundamental error lies in the drawing of the first boundary, and it is this mistake, I want to argue, that Wittgenstein's remarks on solipsism set out to diagnose and to resist.

8. At *TLP* 5.633, Wittgenstein introduces an analogy between the relation between the subject and the world and the form of the visual field. Ultimately,

of course, Wittgenstein does not want to reject the analogy, but he uses it, in the first instance, to expose the misconception in Russell's idea of the relation between the subject and the world. Thus, the suggestion is that Russell's conception of that relation as constituted by a two-place, external relation between particulars corresponds to the mistaken picture of the visual field that Wittgenstein draws in *TLP* 5.6331. 'Self-acquainted-with- ϕ ' is, for Russell, an objective complex with which the subject is immediately acquainted. The self and the sense-data that constitute the objects of an individual's private world are constituents in complexes of this form.

Thus, we can define the objects that constitute objects of the private world of an individual subject by means of the external relation of acquaintance that holds between these objects and the self. This conception of the relation between the self and the world, Wittgenstein claims, is equivalent to a drawing of the visual field, in which the eye is taken to be a constituent of the field and a boundary is drawn around the objects that belong to the visual field, on the basis of a characteristic external relation that each of these objects bears to the eye. If this interpretation of the target of *TLP* 5.6331 is correct, then it suggests a particular way of understanding *TLP* 5.634. *TLP* 5.634 is a comment on *TLP* 5.63 ('I am my world. (The microcosm)'), and thus on a remark which is intended to help us to avoid Russell's mistake.¹ *TLP* 5.634 runs as follows:

This is connected with the fact that no part of our experience is at the same time a priori.

Whatever we see could be other than it is.

Whatever we can describe at all could be other than it is.

There is no a priori order of things.

Peter Sullivan has argued that this remark should be regarded as the pivot of Wittgenstein's reflections on solipsism, even though interpreters have tended to pass over it without comment. Sullivan's own interpretation of *TLP* 5.6–5.641 makes the remark central and he uses it to argue that Wittgenstein's principal target in these remarks is the transcendental idealist. Sullivan

¹ It is worth noting that in the *Notebooks* *TLP* 5.634 follows immediately after Wittgenstein's observation concerning the form of the visual field (i.e. *TLP* 5.6331). The numbering in the *Tractatus* suggests Wittgenstein recognizes that his remarks on the a priori are connected with the correct conception of the relation between the subject and the world (as expressed in *TLP* 5.63). He therefore numbers the remark in such a way that it refers back to *TLP* 5.63, rather than the misconception expressed in *TLP* 5.6331.

reads *TLP* 5.634 as an expression of Wittgenstein's rejection of a substantial a priori and thus of the transcendental idealist's attempt to guarantee a harmony between thought and reality. The idea is that Wittgenstein sees the transcendental idealist as achieving a harmony between thought and reality only at the expense of taking a sideways-on view, expressed by the mistaken drawing of the visual field, in which the world to which the subject stands in an immediate cognitive relation is inevitably revealed as less than all there is. Sullivan writes:

The subject cannot be represented as in coordination with reality except from a perspective to which the 'world' to which the subject stands in relation is less than all there is. But now the world of this broader perspective necessarily claims for itself the title of *the* world, and in doing so contradicts the original insight: *the* world is no longer the subject's world, and so becomes something *other* again. (Sullivan, 1996, p.204)

Sullivan then argues that Wittgenstein's conception of a purely formal a priori, expressed in the general form of a proposition, disarms the question how we can guarantee that reality does not outstrip our capacity to describe it in propositions. Given that *any* proposition with a sense is a value of the general form of a proposition, the notion of language and world are seen to be interdependent notions. '[I]t is that,' Sullivan argues, 'which allows the equation of my language, or the only language I understand, with language *tout court*, and hence of my world with the world' (Sullivan, 1996, p.209). Wittgenstein's purely formal a priori guarantees that any thinkable state of affairs can be expressed in a proposition of my language. Furthermore, Sullivan argues, this purely formal conception of the a priori, which permits an utterly non-restrictive notion of language and the world it represents, requires that we also reject a substantial determinate conception of the subject. That is to say, a purely formal conception of the a priori requires that the 'I think' is itself an empty formal notion that does not involve a reference to a substantial entity. Thus, the mistaken picture of the visual field in *TLP* 5.6331 is mistaken on two counts: in making the subject an entity, when it is a purely formal 'I think', and in drawing a substantial boundary round the world, when the notion of the world is, on Wittgenstein's formal conception of the a priori, utterly non-restrictive.

Sullivan is clearly correct in recognizing that Wittgenstein's conception of logic is central to his response to solipsism, and to his conception of the nature of the thinking subject. However, the idea that the main targets of *TLP*

5.6–5.641 are Russell’s conception of logic, and his view of the relation between the subject and the world, leads to a different interpretation of *TLP* 5.634. For now Wittgenstein’s objective is not to discredit a transcendental view of the relation between the subject and the world, but a conception of the relation between the subject and the world that treats the relation as an external, that is, empirical, relation. Similarly, the view of the a priori that he is opposing is not the Kantian idea of a synthetic a priori that guarantees the harmony between thought and reality, but Russell’s conception of logical forms as logical objects whose existence is equivalent to the existence of constituentless facts, expressed by means of maximally general propositions, such as ‘something is related to something.’²

9. Given that there are these two distinct strands to Wittgenstein’s conception of what goes wrong in Russell, it helps to break the three comments on the a priori, in *TLP* 5.634, down into two distinct, but interrelated, groups.³ The first two comments,

Whatever we see could be other than it is.

Whatever we can describe could be other than it is.

are directed at Russell’s conception of the relation between the subject and the world, as expressed in the mistaken drawing of the visual field, and constitutes a rejection of Russell’s treatment of the relation as belonging to the level of facts. The third comment,

There is no a priori order of things.

is directed at Russell’s conception of the relation between logic and the world, and constitutes a rejection of Russell’s idea that logic is an a priori science, or that the task of philosophy is to catalogue which logical forms exist. These two strands—the relation between logic and the world and the relation between

² I agree with Sullivan that Wittgenstein rejects the Kantian notion of a synthetic a priori. However, the question is whether this notion is the immediate target of *TLP* 5.634. There is also a question whether there is not something fundamentally Kantian in Wittgenstein’s conception of the nature and status of logic. Thus, Wittgenstein’s opposition to Frege and Russell might be seen as a vindication of Kantian conception of logic:

General logic abstracts from all content of cognition, i.e. from any relation of it to the object, and considers only the logical form in relation of cognitions to one another, i.e. the form of thinking in general. (A55/B79)

³ Breaking the remarks up in this way has some justification. The remarks in the *Notebooks* (*NB*, p.80), on which *TLP* 5.634 is based, contains the first two sentences but not the third. The third sentence is added in the *Prototractatus*, where it occurs immediately after the other two sentences but is given a separate number (*PT* 5.33545 and *PT* 5.33546, respectively).

the subject and the world—are, as Sullivan claims, intimately connected. However, if we see Wittgenstein's targets as Russellian, then what binds the two strands together, in general, is the fact that Russell's misconception of the relation between logic and the world, and of the relation between the subject and the world, is, in each case, an expression of the same error: he treats what is, in each case, an internal relation as if it belonged to the level of facts; he treats what is internal to the representation of states of affairs on the model of the empirical. In the remarks on solipsism, Wittgenstein uses his insights into the nature and status of logic to show that neither of these relations belongs to the level of facts: neither the logic of the world, nor the relation between the subject and the world, concerns what exists *in* the world, and neither is expressible in the form of a proposition.

On this interpretation, then, the idea invoked by Wittgenstein's assertion 'that no part of our experience is at the same time a priori' is Russell's idea that all cases of human awareness have the necessary, a priori structure 'self-acquainted-with- φ ', where φ is a sense-datum. Russell is implicitly claiming that there is an essential structure in all human experience, which, insofar as it is a form of self-conscious awareness, could not be otherwise, and which is described in a relational proposition of the form, 'I am acquainted with *A*.' Thus, he effectively treats the subject's relation to the world as on the same level as any other fact that involves a dual relation, but as a fact that necessarily obtains insofar as I am a self-conscious subject of experience.

What Wittgenstein wants to do in the remarks on solipsism is bring out the connection between this error and Russell's error of supposing that logic has something to do with how the world is, or of thinking that we can establish a priori, by means of a form of logical experience, which logical forms exist. He wants, furthermore, to bring out the analogy between a correct understanding of the relation between logic and the world and a correct understanding of the relation between the subject and the world. Russell's error, in each case, is to treat what is essentially internal to the representation of states of affairs in language as if it concerned a matter of fact. Once the relation between logic and the world, and between the subject and the world, is seen to be an internal relation, then we are in a position both to recognize the truth in solipsism and to see that 'the self of solipsism shrinks to a point without extension, and there remains the reality co-ordinated with it' (*TLP* 5.64).

10. Thus, the idea is that we should divide *TLP* 5.6–5.641 into two critical strands, each directed at the ideas of Russell, and between which Wittgenstein

sees an intimate connection and an important analogy. On the one hand, there are remarks (*TLP* 5.6–5.621) on the relation between logic and the world; and on the other, there are remarks (*TLP* 5.63ff.) on the relation between the subject and the world. The interpolating of *TLP* 5.61 into the discussion of solipsism makes it clear that it is Wittgenstein's reflections on the nature and status of logic, and, in particular, his rejection of Russell's idea that logic has something to do with how the world is—i.e. with a question of existence or non-existence—that provides the key to his reflections on solipsism. Let's focus first, therefore, on the strand that concerns the relation between logic and the world. The investigation of the nature of a proposition has now made the nature of this relation perspicuous. The remarks on the status of logic that separated the remarks on solipsism in the *Prototractatus* from what becomes *TLP* 5.61 occur in the *Tractatus* immediately prior to the discussion of solipsism.

In *TLP* 5.5ff., Wittgenstein sums up his rejection of Russell's conception of philosophy as follows. First of all, he breaks the question of logical form down into two separate parts. On the one hand, there is logic as it is shown in tautologies and which constitutes the essence of all representation of states of affairs. The investigation that precedes these remarks has served to make perspicuous the a priori status of logic insofar as it is the framework of all thought that aims at truth. The logical order that is essential to the representation of states of affairs is expressed by a single logical primitive: the general form of a proposition. This variable, of which every proposition that represents states of affairs is a value, expresses everything that can be settled 'without more ado' (*TLP* 5.551): all thoughts are truth-functions of logical pictures. By contrast, the logical form of elementary propositions that describe particular states of affairs cannot be determined a priori, 'without more ado'. In this case, it is only the application of language in actual acts of representation that shows us what forms of elementary propositions there are. However, it is now clear that the question of what forms of elementary propositions there are is *only* a question of what forms of elementary proposition have been projected onto reality. The essence of representation—i.e. what is essential to language's representing the world—concerns the form of the method for projecting propositions onto reality, which is expressed by means of the general form of a proposition, and has nothing to do with what is the case. As Wittgenstein remarks, 'it would be completely arbitrary' to specify the forms of elementary propositions

a priori; it is a question of what projections have been made, and that is something that is shown in the actual use of language.

Thus, Russell's question of what logical forms there are, of whether the subject–predicate, or the relational, form exist, expresses a misunderstanding of the nature and status of logic. There is no question of what has to exist in order for us to represent states of affairs in elementary propositions, in the way that we do. What is essential to the representation of states of affairs in elementary propositions is expressed by the general form of a proposition and concerns how elementary propositions symbolize, not what is the case. What is essential to representation belongs to the method of projecting signs, and not to what obtains in reality. The question of existence or non-existence arises only in connection with the states of affairs that are represented, and thus only once we have propositions that can be compared with reality for truth or falsity; it does not arise in connection with the method of projection that makes that comparison possible. Thus, there is the logic we cannot invent: 'that which makes it possible to invent' logical forms, that is to say, that which makes it possible to project symbols onto the world. And there is the logic that is, in a certain sense, arbitrary: the logical forms of elementary propositions, which have been invented through the projection of these propositions onto the world. The latter is shown in the actual employment of language and cannot be settled a priori, 'without more ado', but equally, it has nothing to do with what is the case, that is, with what exists or does not exist in reality.

In the *Notebooks*, on 1.6.15, Wittgenstein writes:

The great problem round which everything that I write turns is: Is there an order in the world *a priori*, and if so, what does it consist in? (*NB*, p.53)

The answer that Wittgenstein eventually gives to the question is clearly, No: '[t]here is no a priori order of things.' Peter Sullivan, as we've seen, interprets Wittgenstein's negative as a rejection of transcendental idealism and of the idea of a substantial a priori. I don't want to claim to be able to show that this interpretation is incorrect, but only to provide another way of understanding Wittgenstein's rejection of an a priori order of things. The idea is that in making the nature and status of logic perspicuous, Wittgenstein has made it clear that, insofar as logic does not represent, it belongs to the subject side, and not to the side of the object. It is what is essential to representation, and what is essential to representation has nothing to do with how the world *is*, or

with what the facts are. There is no a priori order of things that is constituted independently of the representation of states of affairs in language. This holds both for the logic that we do not invent—the essence of representation as such, ‘the absolutely necessary signs’ (*TLP* 6.124)—and for the logic we do invent: the logical form of propositions that are projected onto the world. Logic does not belong on the same level as facts: it is internal to the system of representation as it stands in a projective relation to the world, and cannot itself be represented in propositions.

11. The placing and numbering, in the *Prototractatus*, of the remark that becomes *TLP* 5.61 makes it clear that it is a comment on the above ideas concerning the nature and status of logic. The remark runs as follows:

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 these limits from the other side as well.

We cannot think what we cannot think, so what we cannot think we cannot *say* either.

The remark can clearly be read as a summary of what has gone before. The idea that logic pervades (or fills) the world is just the idea that there is no representation of the world without logic; logic is prior to truth or falsity; it is what makes it possible to compare propositions with reality in the way that we do. There is no representation of states of affairs without logic; and there is no logic without representation of states of affairs. Logic has no content, but it presupposes the existence of propositions with content. Logic and the representation of states of affairs are reciprocal notions. We cannot say in logic, ‘The world has this in it, and this, but not that’, because that would be to treat logic as if it were on the same level as facts, when it is independent of, and prior to, what is the case. Thus, ‘there can be no classification’ in logic (*TLP* 5.545). The ‘cannot’ that occurs here does not amount to a claim that the attempt to describe the logic of the world in propositions results in nonsense, but to the idea that there is nothing that so much as counts as an attempt: logic is the limit of representation. It is the limit of representation, not in the sense of a boundary, or in the sense of something by which we are confined or restricted, but in the sense that there is no representation of the world without it: all representation of the world takes place by means of it. That the world

is thinkable does not, therefore, draw a boundary round either the world or thought. It is merely a reflection of the internal relation between logic and the world. What stands outside this limit is simply nonsense, that is, that which has no projection onto reality: 'We cannot think what we cannot think, so what we cannot think we cannot *say* either.'⁴

Wittgenstein's discussion of solipsism begins with the following remark:

The limits of my language mean the limits of my world. (TLP 5.6)

The interpolation of *TLP* 5.61, as a comment on *TLP* 5.6, shows that we should understand the limits of my language as corresponding to the logic of my language, everything that is essential to the expressions of my language symbolizing in the way that they do. The logic of my language is the limit of what is thinkable or representable by me, the limits of logical space. Thus, 'Logic pervades the world; the limits of the world are also its limits.' The significance of the introduction of the personal pronoun in *TLP* 5.6 is simply that, having investigated the nature of a proposition and the nature and status of logic in a completely abstract and entirely general way, we must now draw out the significance of these reflections for the only language I understand: my language.⁵ The upshot of the general reflections is that there is no intelligible notion of the world that is independent of the idea of what is thinkable in a language that represents states of affairs: the thinkable represents a limit on the other side of which there is simply nonsense. We don't, on this reading, have anything equivalent to a proof that my language embraces the whole of reality conceived as something given.⁶ It is rather that the idea of a world

⁴ This interpretation of *TLP* 5.61 connects it with Wittgenstein's rejection of Russell's conception of philosophy as a catalogue of logical forms, and thus with the idea that there can be no classification in logic. Logic has to do with how symbols symbolize and thereby express their sense; it is what shows itself in the use of expressions in propositions with sense and it cannot be represented. This contrasts with interpretations, such as that of Pears (Pears, 1987, chap.7), which take it that *TLP* 5.61 connects with the idea that '[e]mpirical reality is limited by the totality of objects' (*TLP* 5.5561), and thus with the idea that we cannot attribute existence and non-existence to objects. To read *TLP* 5.61 this way is, I want to argue, to read Wittgenstein's remarks on solipsism on the model of Russell's conception of the topic, and thus to miss what is most distinctive in Wittgenstein's approach to the issue.

⁵ I understand 'my language' to mean the natural language that I speak, e.g. English, German, etc. Insofar as this language shares a logical form with (is translatable into) other natural languages, these may be thought of as alternative notations: it is only the signs that differ; the thoughts expressed are the same. As McGuinness notes, Wittgenstein assumes 'that all natural languages are different realisations of . . . one system' (McGuinness, 2001/2002, p.136).

⁶ An object-based interpretation of the sort that is given by Pears clearly seems to invite the idea that *TLP* 5.6 is making a claim along these lines. Wittgenstein's starting point is thus understood

other than the world that is described in the true propositions of my language, on which the very idea of such a proof depends, is unintelligible. The world—my world—is simply what is described in the true propositions of my language. There is a question of what is the case in the world—i.e. of which propositions are true and which are false—but there is no other, or further, question of whether the world I describe in the true propositions of my language corresponds to something wholly outside language.

12. It is, Wittgenstein writes, this remark (i.e. *TLP* 5.6) that ‘provides the key to the problem, how much truth there is in solipsism’ (*TLP* 5.62). What does Wittgenstein mean by ‘solipsism’ here? I’ve suggested, following Brian McGuinness, that we should read the remarks on solipsism in the *Tractatus* as concerned primarily with the subject of outer experience. In this context, solipsism is the thesis that the world is my idea, that is, it is not something that can be conceived independently of its relation to me. Wittgenstein goes on:

For what the solipsist *means* is quite correct, only it cannot be *said*, but makes itself manifest.

The world is *my* world: this is manifest in the fact that the limits of language (of that language which alone I understand) means the limits of *my* world. (*TLP* 5.62)

It is now clear why *TLP* 5.6 provides the key to the problem how much truth there is in solipsism. For the point of *TLP* 5.6 is that the world is simply what is described in the true propositions of my language, ‘that language which alone I understand’. There is no intelligible notion of the world that is independent of what is describable in my language, and with which the world as represented in the true propositions of my language could be compared for correctness or incorrectness. That is to say, there is no intelligible notion

to be very similar to Russell’s. On Pears’s reading, it is Wittgenstein’s response to this starting point that is different. Thus, he doesn’t try to show that there is a reality beyond what is given. Rather, he tries to show that there is something correct in the solipsist’s idea, but it cannot be said: it makes itself manifest. Given the understanding of the starting point, this can leave us with a sense that Wittgenstein’s idea of the ‘the world is my world’, that ‘what the solipsist *means* is quite correct’, contains a residue of subjectivism, i.e. that some restriction on the world remains ineffably in place. This is apparent in Pears’s final summary of what he takes to be the essence of Wittgenstein’s sympathy with solipsism: ‘He does not subscribe to solipsism in the *Tractatus*, because that would commit him to treating it as a theory capable of being true or false. He merely concedes that the solipsist has got hold of a good point of a kind which cannot be stated in factual discourse but only shown: the subject is the inner limit of the world’ (Pears, 1987, p.188). On the interpretation developed here, the truth in solipsism amounts to the more innocuous idea that there is no intelligible notion of the world other than as that which is described in the true propositions of my language.

of a reality beyond, or outside, or independent of the world as I describe or represent it in true propositions.

All this is simply a bringing to bear of the reflections on the nature of a proposition and the nature and status of logic, which have been the central topic of the book, on the idea of my language. The truth in solipsism that is made clear in the clarification of the internal relation between language and the world is that the world is essentially thinkable. However, implicit in the recognition of the essential thinkability of the world is the recognition that the notions of the world and of a subject who represents it are also reciprocal notions. The subject does not create the world: which states of affairs exist or do not exist is independent of the subject, and established only a posteriori. However, the world is not conceivable other than in propositions that belong to a system of representation that stands in a projective relation to reality. Moreover, the idea of a projection of language onto reality contains the idea of a subject who makes the projection; wherever there is representation of the world in propositions, there is a subject who is in a position to say 'I think . . .'.⁷

Thus, Wittgenstein introduces the idea, implicit in all that has gone before, that the subject and the world are correlate notions:

The world and life are one. (*TLP* 5.621)

It is here that the second strand of Wittgenstein's critique of Russell begins. For Russell, as we've seen, makes the same mistake in his conception of the relation between the subject and the world that he makes in his conception of the relation between logic and the world: he treats both as belonging at the level of facts. What Wittgenstein does now is show that the subject–world relation, like the logic–world relation, is an internal relation, and that it cannot be expressed in a proposition of the form, '*aRb*'.

13. Wittgenstein's investigation of the nature of the subject that is the correlate of the world begins at *TLP* 5.63. The point of *TLP* 5.621 is, as we've just seen, that there is no notion of the world without a reciprocal notion of a subject. This parallels the idea that there is no representation of states of affairs without logic. It is, of course, essential to the idea of an internal relation between logic and the world that logic—both the logic that we do not invent and the logic that we do invent—does not represent. Thus, the internal relation between logic and the world essentially goes both ways: there is no logic

⁷ cf. 'I have to judge the world, to measure things' (*NB*, p.82).

without representation of the world. And the same applies in the case of the internal relation between the subject and the world:

I am my world. (The microcosm.) (*TLP* 5.63)

Insofar as there is an internal relation between the subject and the world, the subject is not something *in* the world, but is purely a correlate of it. Neither notion—the notion of the thinking subject or of the world—can be made intelligible independently of the other. That is to say, the notion of the subject that is the essential correlate of the world cannot be conceived directly; it cannot be represented. It is not something that exists *in* the world; in that sense, there is no such thing:

There is no such thing as the subject that thinks or entertains ideas. (*TLP* 5.631)

The idea of the book, *The World as I found it*, underlines the point that the subject that is the correlate of the world—the thinking subject—cannot be the empirical subject. For as an empirical subject, I am on the same level as all the other empirical objects—the human beings, animals, plants and stones—that constitute the empirical world. What distinguishes the thinking subject is that it exists, not as a part of the world, but as an orientation to the world; that is to say, the thinking subject exists insofar as it represents the world to itself. Wittgenstein, I want to claim, intends us to use the comparison with the status of logic to make the idea of the thinking subject that is the correlate of the world perspicuous: the thinking subject exists simply insofar as the world is represented. It is manifest in the fact that the world is represented—in ‘the fact that “the world is my world”’ (*TLP* 5.641)—and it cannot be described in a proposition that describes how the world is. Thus, just as we’ve come to see that logic has nothing to do with what is the case, but with the limits of representation, so the thinking subject does not correspond to anything in the world, but is ‘a limit of the world’ (*TLP* 5.632). That is to say, the idea of a thinking subject separable from the representation of the world in propositions is unintelligible: the thinking subject cannot be represented.

14. Thus, it is in language that subject and world meet. We don’t have a notion either of a thinking subject or of a world that is independent of the notion of a language in which a subject represents states of affairs. These ideas are clearly closely connected with Wittgenstein’s discussion of ‘*A* judges that *p*’, at *TLP* 5.54ff. To recognize another as a thinking subject is not to establish that two things (a private self and a proposition) stand in an external relation to one another. It is rather to recognize that the sounds the other utters express

a proposition with sense, that is, a proposition that represents a possible state of affairs. This recognition is expressed by my using a proposition of my language to give the content of the other's thought. The proposition that I use to express this recognition—'A judges that p '—identifies the subject to whom I attribute the thought by means of a reference to an empirical subject: the human being denoted by 'A'. However, in recognizing the other as expressing a thought, I implicitly recognize that the other is not merely a constituent of my world, but that he, like me, has an orientation towards it.

It is precisely because the thinking subject is not an entity that I can recognize others as thinking subjects. It is not a matter of achieving indirect knowledge of their private self, but simply a matter of recognizing the other as representing states of affairs, that is, of recognizing that the sounds he utters express propositions with sense: of recognizing ' p ' says p ' (*TLP* 5.542). The reference to the empirical subject is simply a device, essential in the third-person case, for identifying who it is that judges that p . Thus, in the case of others, we still need a distinction between the empirical subject—the human being who is a constituent of the world—and the subject who represents the world to himself, that is to say, who judges, believes, doubts, and so on that p . The subject of my third-person ascriptions is, therefore, essentially a subject of first-person expression of thoughts, that is, a subject who expresses thoughts without employing any name that identifies the subject of the thought. Wittgenstein makes the point at *TLP* 5.5421 as follows:

This shows too that there is no such thing as the soul—the subject, etc—as it is conceived in the superficial psychology of the present day.

Indeed a composite soul would no longer be a soul.

The thinking subject is not a simple object, as Russell was inclined to believe; there is no such object. But nor is the thinking subject the complex human being that is part of the world, along with the animals, plants and stones. The thinking subject—the subject who represents the world—is not a part of the world at all, in the way that 'the superficial psychology of the present day' conceives. It is only insofar as we recognize the other as a subject who projects propositional signs onto the world that we identify the other as a subject who thinks. This is not a matter of discovering that an object stands in a certain relation to a proposition, but simply of perceiving the proposition in the propositional sign that is uttered by another, that is, of recognizing ' p ' says p .

There is, therefore, a sense of the notion of a subject that is not dealt with in empirical psychology. This is the sense of the subject on which it is not

a constituent of the world, but is simply the correlate of the representation of the world in propositions. Wittgenstein makes the point at *TLP* 5.641 as follows:

Thus there really is a sense in which philosophy can talk about the self in a non-psychological way.

What brings the self into philosophy is the fact that ‘the world is my world.’

Although Wittgenstein uses the first-person pronoun here, the interpretation of *TLP* 5.54ff, presented above, suggests that the notion of the subject that is the correlate of the representation of the world in propositions is not essentially first-personal, for I can recognize others as subjects who represent the world to themselves. The notion of privacy, which is central to Russell’s misconception of the self as a constituent of the world, has disappeared with the recognition that the notion of the thinking subject is exhausted in, and inseparable from, the representation of the world in propositions.

15. To say that the thinking subject is a limit of the world is, on this interpretation, simply to recognize that whenever there is representation of the world there is a correlate notion of an active subject who projects propositional signs onto reality. Earlier I suggested that Wittgenstein’s aim is to make clear that the idea of logic as the limit of the world cannot be understood in the sense of a boundary, but is to be understood in the sense that there is no representation of the world without logic. It is now clear that the idea of the subject as a limit of the world has to be understood in the same way. The world is not conceivable independently of propositions that stand in a projective relation to the world; whenever there is representation of the world in propositions there is a subject who is in a position to say ‘I think . . .’. Thus, the notions of the subject, logic, and world stand as correlates of one another; they cannot be understood, or made intelligible, independently of one another. This is not—either in the case of logic or in the case of the subject—to draw a boundary round the world. It is, as Peter Sullivan says, not to impose a restriction on the world at all. Rather, it is to recognize that the notion of the world has no content independently of the notion of what is described in the true propositions of *my* language. Thus, we come to the climax of Wittgenstein’s remarks on solipsism:

Here it can be seen that solipsism, when its implications are followed out strictly, coincides with pure realism. The self of solipsism shrinks to a point without extension, and there remains the reality co-ordinated with it. (*TLP* 5.64)

Russell's idea that a reply to the solipsist should take the form of a good reason to believe that there are neutral objects beyond the private sense-data with which I am immediately acquainted is now seen to be completely misconceived. The world—that is to say, the neutral, intersubjective states of affairs that are represented by the propositions of my language, and whose existence or non-existence is independent of my knowledge of them—is essentially within the cognitive grasp of anyone who understands this language. As McGuinness puts it, 'everyone has the same relation to the whole world' (McGuinness, 2001/2002, p.138). The world is my world insofar as I represent the world to myself, but this relation of representing is not one of ownership and it is not exclusive; it does not belong to the level of facts. It is expressed simply in my representing the world in propositions that anyone can understand. Thus, Wittgenstein believes that by a careful elucidation of the nature of the relation between the subject and the world, the problem, to which Russell's response to solipsism is intended to be an answer, completely disappears.

Turning the Examination Round

1. My interpretation of the text of the *Tractatus* is now complete. I want to end by saying something about the relation between Wittgenstein's early work and his later philosophy. Wittgenstein's critical response to the *Tractatus* begins immediately on his return to full-time philosophy, in the winter of 1929. Some of his early criticisms focus on detailed aspects of his treatment of specific topics, for example, his commitment to the logical independence of elementary propositions, his analysis of propositions containing the sign for generality, and his assimilation of facts and complexes. However, in this final chapter I want to focus on articulating the fundamental shift in Wittgenstein's approach to the task of understanding how language functions, which takes place from the early 1930s onwards. The aim is to characterize the nature of this shift and to bring out the way in which it occurs against a background of a more fundamental continuity in Wittgenstein's conception of his philosophical task, in particular, in his sense that revealing how language functions is a matter of 'recogniz[ing] *how* language takes care of itself' (*NB*, p.43). It is not simply that Wittgenstein remains wedded to the methodological principle that '[t]here must not be anything hypothetical in our considerations', that '[w]e must do away with all *explanation*, and description alone must take its place' (*PI* 109), but that in important respects the *Philosophical Investigations* can be seen as Wittgenstein's reworking of ideas that are central to the *Tractatus*. I want to argue that we can see the *Investigations* as almost a second version of the *Tractatus*, a version in which the myths about meaning, determinacy of sense, the essence of representation, and so on have been purged, and in which Wittgenstein directs his attention to the actual employment of expressions within the active everyday lives of speakers.

2. In his 'Introduction' to the *Tractatus*, Russell famously claims that Wittgenstein 'is concerned with the conditions which would have to be fulfilled by a logically perfect language' (*TLP*, p.ix). It is universally agreed that Russell

here expresses a fundamental misunderstanding of the role of the ideal in Wittgenstein's early work. Wittgenstein's early commitment to the idea that logic constitutes the essence of representation, and to the idea that logic requires complete determinacy of sense, means that the ideal does not await construction by us, but rather 'there must be perfect logical order even in the vaguest sentence' (*PI* 98). The ideal is not something that he believes ordinary language merely 'approaches', as Russell suggests, but is something that "'must" be found in reality', indeed, '[he] thinks [he] already see[s] it there' (*PI* 101). The project of clarification that Wittgenstein undertakes in the *Tractatus* is, I've argued, undertaken within the framework of this commitment to the idea that 'the ideal "'must" be found in reality.' The dogmatism of the *Tractatus* lies, to a large extent, in the role that the idealized picture of the logic of our language plays within it: the role of 'a preconceived idea to which reality *must* correspond' (*PI* 131). To understand the relation between the early and the later work is, at least in part, to understand the effect on Wittgenstein's philosophy of his liberation from the preconceived idea of language as an exact calculus, which governs his early thought.

AT *PI* 108, Wittgenstein writes:

The preconceived idea of crystalline purity can only be removed by turning our whole examination round. (One might say: the axis of reference of our examination must be rotated, but about the point of our real need.)

The remark underlines the fact that it is Wittgenstein's liberation from the preconceived idea of exactness that represents the decisive shift in his philosophical development. The liberation can only be achieved, he suggests, 'by turning our whole examination round'. Thus, in order to remove the preconceived idea that the ideal must be found in reality, the whole direction of our investigation must be altered. But how is the idea of 'turning the whole examination round' to be understood? Oskari Kuusela takes up this question and responds to it with a compelling account of the fundamental shift that divides Wittgenstein's early and later philosophy.¹ Kuusela argues that we should understand the turn that Wittgenstein alludes to in *PI* 108 as an alteration in the place that is occupied by the idealized representations of language, that is, of the use of expressions, that the philosopher inevitably constructs. He suggests that it is his misunderstanding of the role that these idealized

¹ See Kuusela, 2005. The change in Wittgenstein's conception of the role of the ideal is also illuminatingly discussed by Stephen Hilmy (Hilmy, 1987, chapter 3).

constructions have in philosophy that leads Wittgenstein into putting forward ‘metaphysical theses’ about language—i.e. dogmatic claims concerning the essence of language—in the *Tractatus*.

3. Kuusela characterizes Wittgenstein’s view of the general nature of the fundamental philosophical confusion that leads to the dogmatism of his early philosophy as follows:

the metaphysician projects a way of using language on reality, Being projected onto reality, a necessity characteristic of this way of using language appears as a necessary feature of reality. It seems that things are necessarily how the philosopher states them to be. . . . [T]he metaphysician is caught up in an illusion, mistaking the reflection of his own concepts on reality for a truth about reality. (Kuusela, 2005, p.101)

In the *Tractatus*, the object of investigation is language and Wittgenstein’s error is to construct a particular conception or model of a proposition—expressed in the general form of a proposition—and then treat it as a picture of the essence of propositions as such. What is really no more than a representation or model that captures salient aspects of an important class of cases is now projected onto reality, that is, onto the object of investigation. Thus, the essential or necessary features of Wittgenstein’s model are dogmatically asserted to be the essential or necessary features of the thing itself: ‘a particular conception of propositions is turned into a metaphysical thesis of what propositions must be’ (Kuusela, 2005, p.102). Wittgenstein’s error leads him to mistake what is merely a model of the essence of a proposition for the essence of propositions; what is no more than a mode of presentation is mistaken for the coming into view of the essence of language. In this way, he is led into making a general claim to the effect that his particular, idealized conception of the essence of a proposition holds for all propositions as such. Thus, the general form of a proposition is held to characterize the common feature that constitutes the comprehensive essence of all propositions.

Kuusela argues that, although the *Tractatus* officially eschews philosophical doctrine, and even though Wittgenstein requires the reader to recognize that the remarks that make up the work are nonsense, his dogmatic commitment to a preconceived idea of the essence of a proposition is expressed in his imposing strict requirements on the method of analysing the propositions of ordinary language; a certain form of analysis is presented as universally applicable to all propositions. Kuusela writes:

the *Tractatus* has a metaphysics of language built into its methodology of logical analysis. Analysis in the *Tractatus* operates with a particular notion of the general form of

proposition, assuming as its *modus operandi* that every proposition has this form, i.e. is a presentation or a picture of a state of affairs This means then also that even if all formulations of the *Tractatus*' theory of language are nonsense (as it says, cf *TLP* 6.54), insofar as the purpose of the book is to communicate a general programme for philosophy as logical analysis, the metaphysics of language is inevitably there too. It is embodied in the activity of clarification as the form of this activity. (Kuusela, 2005, p.98)

Kuusela now suggests that we should see the fundamental shift that constitutes 'turning our whole examination round' as a self-conscious refusal to project the models of the use of expressions that philosophers construct onto the object of investigation. The mistake that the turn is intended to overcome has been characterized by Kuusela as the error 'of confusing a prototype—a model for presenting an object of investigation—with the object of investigation itself' (Kuusela, 2005, p.110). The mistake is overcome by our coming to recognize the model or prototype for what it is: 'an exemplary case, to bring out certain characteristics of the object of investigation' (Kuusela, 2005, p.116). Thus, we can avoid the dogmatism of putting forward a general claim concerning the essence of a proposition insofar as we succeed in 'keeping the prototype in its proper place: as a mode of representation, a model or picture which we use to present our object of investigation' (Kuusela, 2005, p.116). The prototype by means of which we model the use of expressions is no longer to be made the source of general theses about the object of investigation, but is to be treated as something with which the object of investigation may be compared, and by means of which we try to capture some aspect of it. Kuusela sums up the point as follows:

To sum up the idea of Wittgenstein's turn it can be characterized as a shift from the ideal as a *Vorurteil* (preconception) to which the object of investigation must correspond to the ideal as a *Vorbild* (model, object of comparison) that is used as an instrument of presenting the object of investigation. (Kuusela, 2005, p.131)

The reason for constructing these models, as objects with which our actual use of expressions may be compared, is to help resolve the philosophical puzzles that arise from a misunderstanding of how particular concepts function. Once the misunderstanding is dispelled, and the philosophical problem it gave rise to has disappeared, the comparison has done its work; no metaphysical residue remains.

Kuusela's interpretation of Wittgenstein's 'turn' clearly places his reading of the early work firmly within the anti-metaphysical tradition. The error

of the early work is held not to lie in its attempt to explain the connection between language and the world, but in Wittgenstein's dogmatic commitment to a preconceived idea of the process of analysis. Thus, Kuusela shares with Diamond and Conant the idea that the illicit role that is played by Wittgenstein's idealized model of language as a calculus that is operated according to precise rules is primarily a methodological one: it finds its expression in Wittgenstein's commitment to a particular conception of the form that a complete analysis of a proposition with sense must take. For Kuusela, the methodological shift that defines the later philosophy escapes the dogmatism of the early philosophy simply by recognizing that there is no correct or final analysis of the propositions of ordinary language. Any rule that the philosopher constructs to describe the use of an expression, any analysis of propositions that he provides, is merely a particular representation or model of the object of investigation, and it is no longer to be mistaken for a final determination of its essence. It is understood that the philosopher's descriptions are always given from a particular point of view, with a particular aim or interest in mind; there are no 'super-descriptions' that bring everything essential into view. The point of these piecemeal or partial representations is to draw attention to a particular aspect of our use of language, which a one-sided diet of examples in philosophy has made us neglect. The representations throw a new light on our concepts or on our use of expressions and thereby relieve the mental cramps that are caused by an entrenched way of looking at things; it is a matter of using one representation of the use of language to combat the pathological effects of another.

There is a great deal in this account that I want to agree with. However, insofar as Kuusela shares Diamond's and Conant's uncompromising understanding of the demands of Wittgenstein's anti-theoretical stance, I believe it fails to do justice to the quite legitimate idea of allowing language to reveal how it functions, which I've suggested is central to both Wittgenstein's early and later philosophy. As a result of this, I want to argue, Kuusela's interpretation of Wittgenstein's early work underplays the role that the idea of language as an exact calculus, and of logic as the essence of representation, plays in the *Tractatus*. The alternative account of the role of Wittgenstein's idealized picture of language that is suggested by the interpretation of the *Tractatus* that I've presented does not imply that Kuusela's account of Wittgenstein's turn is false, but rather that it is incomplete. In particular, by focusing exclusively on Wittgenstein's methodology, and on the role played in it by ideal representations of language, Kuusela fails to consider the question how Wittgenstein's

turn involves a change in the immediate object of investigation itself.² Once we allow that Wittgenstein's anti-theoretical stance permits the idea of an investigation whose aim is to allow language itself to make clear how it signifies, then we are free to understand the turn, not merely in terms of a methodological shift in the role of the ideal, but in terms of the immediate object of Wittgenstein's investigation: he turns his attention away from an idealized representation of language as an exact calculus and towards the concrete phenomena of our life with language. Moreover, I want to argue, once we focus on this aspect of Wittgenstein's turn, then we can begin to recognize a fundamental source of continuity between the early and the later philosophy, which is obscured by Kuusela's account.

4. The interpretation of the *Tractatus* that I've presented tries to show that Wittgenstein's investigation of the nature of a proposition is one that can plausibly be conceived as a project of clarification or description, insofar as it makes no attempt to go outside language in order to explain how it functions. It is true, of course, that in his dogmatic commitment to an idea of the essence of representation, Wittgenstein is led to make a hypothetical claim concerning the possibility of a certain sort of analysis. However, I've argued, following Diamond, that this form of dogmatism is to be carefully distinguished from a metaphysical thesis that attempts to ground language's ability to represent in something outside language, for example, in the logical structure of an independent reality. Thus, I've presented an interpretation on which Wittgenstein's investigation is directed towards the internal relation of depicting that holds between language and the world. The aim of the investigation is to elucidate what Wittgenstein believes language itself makes clear, namely, what is essential and what is arbitrary in any language in which thoughts about the world—i.e. thoughts that are true or false—are expressed. On this interpretation, the dogmatism of the early work does not lie in its claiming a theoretical isomorphism between language and an independent reality, but nor does it lie merely in the conception of analysis to which Wittgenstein is committed. Rather, it is inherent in the framework within which the central task of clarifying how language functions—i.e. how a proposition expresses its sense—is undertaken. Wittgenstein's conception of what it is that needs to be made clear is completely determined by his

² In a sense, of course, Wittgenstein's interest is always in the question how ordinary language functions. However, in the early philosophy, his investigation is actually directed towards an idealized representation of language, rather than on 'the spatial and temporal phenomenon' of language in use.

unexamined commitment to the idea that there is an essence to representation and that where there is sense there must be perfect logical order and complete determinacy of sense. The work of clarification is undertaken within the framework of a preconceived idea of the essence of language and of the nature of a proposition. Thus, the preconceived idea of logic as the essence of representation, and of the requirement that logic imposes for complete determinacy of sense, determines Wittgenstein's conception of the nature of his task of clarification, and thereby the approach that he takes to it. Insofar as the *Tractatus* itself is engaged in a logical investigation of how a proposition expresses its sense, the object on which this investigation is directed is the idealized picture of language as an exact calculus that dominates Wittgenstein's early thought; the project of clarification that Wittgenstein undertakes in the *Tractatus* is, from the outset, directed towards his idealized picture of language.

On this interpretation, the central ideas of the *Tractatus*—that a proposition expresses its sense insofar as it is a logical picture of it; that a proposition is essentially a complex expression whose constituents are indefinable; that a formal concept is expressed by means of a variable; that if a proposition, p , follows from another proposition, q , then the sense of p is contained in the sense of q ; that the propositions of logic are all tautologies; etc—are to be understood as directing our attention to the logical order that must be there in any language in which the world is represented. Within the general framework of the preconceived idea that language must be a calculus that is operated according to precise rules, this order presents itself as one that must already be there in our actual language. Thus, we 'become dissatisfied with what are ordinarily called "propositions", "words", "signs"' (*PI* 105). The idea of analysis comes in to take up the slack between what we ordinarily call a proposition and the idealized conception of the "real signs" that Wittgenstein's preconceptions concerning the essence of language require: the real proposition that a sentence of ordinary language, on a particular occasion of use, expresses is something that must be brought out by means of analysis. However, on this interpretation, the philosophical role of the ideal is clearly not restricted to its operating as a methodological constraint on the conception of analysis that we are left with at the end of the *Tractatus*. The idealized picture of language, and the preconceived idea of logic as the essence of representation, has governed Wittgenstein's whole approach to the task of clarification that is the central project of the work, and which culminates in the expression of the general form of a proposition.

Wittgenstein's early critical engagement with the *Tractatus* expresses a growing appreciation of the dogmatism that is inherent in it. Thus, he gradually begins to realize that the work embodies a commitment to a preconceived idea of the logical order of our language, which is clearly unsustainable once we begin to compare it with the actual facts of language. He is forced to recognize, in particular, that exclusion relations between propositions containing colour predicates cannot be reduced to a formal contradiction; that propositions that are elementary, in the sense of being free of logical constants, are not logically independent of one another; that propositions containing the sign for generality cannot be analysed into logical products and logical sums of elementary propositions; and so on. As Wittgenstein observes in *PI* 107:

The more narrowly we examine actual language, the sharper becomes the conflict between it and our requirement. (For the crystalline purity of logic was, of course, not a *result of investigation*: it was a requirement.) The conflict becomes intolerable; the requirement is now in danger of becoming empty.

Thus, he is forced to recognize that the logical order that his investigation of the nature of a proposition seemed to show is essential to language's signifying in the way that it does is nothing more than an expression of his preconceived idea of language as an exact calculus. The logical order that he uncovers belongs to his method of representing language, and not to language itself; his method is descriptive, but what he has described are the properties of his idealized representation. And this inevitably leads him to question the role of idealized models or pictures in philosophy. He sees that philosophy is not like physics, in which we give 'a simplified description of a natural phenomenon, abstracting from secondary factors' (*PG*, p.77), and then investigate the properties of this ideal model. A simplified, idealized, or more exact language is simply *another* language, one that we have constructed and which stands in contrast with our ordinary language. Nor must we suppose that the more exact language we have constructed is in some way "better" than our ordinary language, for that would be to suppose that there is something outside language against which language can be measured. We may, he suggests, use the more exact languages we construct as objects of comparison, in order to shed light on how our ordinary language functions, but we are not interested in the properties of these constructions in the way the physicist is interested in the properties of his idealized model. That is to say, we're not interested in language in the way we are interested in a natural phenomenon that we are trying to model or explain. We're interested in how our language signifies in

the way that it does, that is, in something that our language itself makes clear, in something that does not call for explanation or modelling, but for clarification and description. Given the nature of our investigation, a language that operates according to exact rules—a language that we make up—is not of interest to us as an object of investigation, but only insofar as we can use it, as an object of comparison, to throw light on the facts of actual language.

Thus, the task of philosophy is not to investigate an ideal language. Once Wittgenstein realizes that the object of investigation in the *Tractatus* is an idealized representation or construct, it loses its interest for him. What he set out to clarify was how our language signifies in the way that it does, to understand the function and structure of *our* language; he is not interested in the properties of an idealized language that is a philosopher's construction. This suggests that the turn that divides the early from the later philosophy concerns, not merely Wittgenstein's understanding of the status of the simplified languages that he constructs in the course of his investigation, but the object on which his whole investigation is directed. It is a turn away from an idealized representation of language as a calculus operated according to precise rules towards our actual, concrete practice of employing language within our active, everyday lives; it is a turn away from an idealized 'non-spatial, non-temporal phantasm' of a precise calculus towards 'the spatial and temporal phenomenon of language' (*PI* 108). Thus, the transformation of the idealized picture of language as a calculus operated according to exact rules, from a picture of the essence of language to something with which our language might be compared, is, on this account, only part of the story. It is the redirecting of the whole investigation of how language functions, away from the idealized picture of language as a calculus that stands in a projective relation to the world, towards the concrete phenomenon of language-in-use that is the real heart of Wittgenstein's turn. It is the actual object of investigation that is changed. In realizing that 'what we call "sentence" and "language" has not the formal unity [he] imagined, that it is a family of structures more or less related to one another' (*PI* 108), Wittgenstein turns his attention away from his preconceived idea of a proposition as a complete and exact representation of a possible state of affairs towards the concrete application of what we ordinarily call a sentence within the everyday lives of human beings.

5. Wittgenstein introduces the idea of 'turning our whole examination round' in the context of his realization that 'what we call "sentence" and "language" has not the formal unity that [he] imagined.' The need to make

the turn is raised in response to a question that this lack of formal unity appears to create concerning the status of logic. In the *Tractatus*, the a priori status of logic is secured and made perspicuous insofar as logic is seen to be everything that is essential to representation as such. Thus, we see that 'logic is not a field in which *we* express what we wish with the help of signs, but rather one in which the nature of the absolutely necessary signs speaks for itself' (*TLP* 6.124). The realization that language lacks the formal unity he supposed, immediately invites the question: what becomes of logic once we abandon the idea that it is the essence of representation as such? Wittgenstein raises the question at *PI* 108 as follows:

But what becomes of logic now? Its rigour seems to be giving way here.—But in that case doesn't logic altogether disappear?—For how can it lose its rigour?

If logic doesn't have the status of the essence of all description of the world, then it seems to lose its absolute status. In what sense, then, does logic constitute a limit of description? If there is no essence of representation, and language is just a practice of employing signs, can't we use signs any way we wish? Wittgenstein responds to the question, 'how can [logic] lose its rigour?', by appealing to the need to 'turn our whole examination round' as follows:

Of course not by our bargaining any of its rigour out of it.—The *preconceived idea* of crystalline purity can only be removed by turning our whole examination round. (One might say: the axis of reference of our examination must be rotated, but about the fixed point of our real need.) (*PI* 108)

I've suggested that we should understand the turn, first and foremost, as a turn away from an idealized image of language as an exact calculus towards the spatial and temporal phenomenon of language-in-use. If this is correct, how are we to understand Wittgenstein's response to the question about the status of logic? First of all, we need to be clear about what Wittgenstein means when he says that our examination is to be rotated 'about the fixed point of our real need'. The question that Wittgenstein is responding to indicates that our 'real need' is to understand the 'rigour' of logic. Why does $\exists xFx$ follow inexorably from Fa or $FavFb$? Why does $\neg\neg p = p$? Why is an order of the form ' φ and don't φ ' one that cannot be obeyed? We now see that we cannot ground the hardness or 'rigour' of logic in the essential nature of signs. We need, therefore, to rid ourselves of the idea that the rigour of logic requires the sort of ideal conditions that Wittgenstein imagined. That is to say, we need to rid ourselves of the idea of the 'crystalline purity of logic', that is, of

the idea that there can be logic only insofar as language is essentially an exact calculus that is operated according to precise rules. We do this by ‘turning our whole examination round’, that is, by turning our attention towards the actual employment of signs in our practice of reasoning, that is, our practice of inferring one proposition from another.

Logic does not lose its rigour when we abandon the idea that language is essentially an exact calculus operated according to precise rules. The rigour of logic lies in the rigour with which we actually apply our techniques for making a transition from one proposition to another on particular, concrete occasions; the rigour with which we train children in the application of these techniques; our complete hostility to employing any techniques but these; and so on. As Anscombe puts it:

[J]ust as “You can’t move your king” is the . . . basic expression for one learning chess, since it lies at the bottom of his learning the concept of the game and its rules, so . . . “You must’s” and “You can’t’s” are the . . . basic expressions in logical thinking. But they are not what Hume calls “naturally intelligible”—that is to say, they are not expression of perception or experience. They are understood by those of normal intelligence as they are trained in the practices of reasoning.

[It is] what one actually does, which is counted as what was meant: *that* is what fixes the meaning: And so it is about following the rules of correct reasoning. One draws the conclusion as one ‘must’. That is what ‘thinking’ means. (Anscombe, 1976, p.121 and p.122, respectively)

The rigour of logic is a matter of the rigour with which human beings are taught to calculate, think, and infer; the rigour of logic never depended upon the idealized conception of logic as the essence of representation—on the idea of the formal unity or essence of a proposition—in the way that Wittgenstein imagined. The rigour of logic is internal to our practice of inference and calculation: these are practices in which there is no question of opinion, the rules *must* be applied like *this*.

The interpretation of the *Tractatus* that is given in the preceding chapters emphasized the central importance of the concept of the use of expressions in propositions with sense. However, I was careful to point out that the notion of use that is present in the *Tractatus* is distinct from the notion of use that operates in the later philosophy. The former is an idealized conception of the use of expressions in propositions that represent determinate states of affairs, within a system of representation (or calculus) that stands in a projective relation to the world; the latter is the idea of the employment of expressions

within a 'multiplicity of language-games' (*PI* 23), where 'language-game' is understood as a 'whole consisting of language and the actions into which it is woven' (*PI* 7). It is clear now that this important change in Wittgenstein's conception of use is the central aspect of the change in the object of his logical investigation: he turns his investigation away from the idealized picture of language as a system of representation and towards the concrete, spatial, and temporal phenomenon of language-in-use. The concept of representation, which is central to his early conception of his object of investigation, gives way to the idea of a life with language, in which we give orders and obey them, describe and measure objects, report on events, frame hypotheses, present results of experiments, tell stories, make jokes, pray, curse, greet one another, and so on.

6. Once we recognize the source of this fundamental change in Wittgenstein's conception of use, and thus in the immediate object of his investigation, we can also begin to trace the deep continuities between the early and the later philosophy. We can begin to see that it is not that the ideas of the *Tractatus* are abandoned, but that they are transformed in the process of the turn away from an idealized conception of language as a system of representation towards the concrete phenomenon of our life with language. Thus, the idea of logic that emerges in the *Tractatus* is not completely rejected in the later philosophy, but altered. There is, for example, still the concern to show that logic does not belong on the level of facts, that it is not grounded in anything outside language, that there is no science of logic, that the notion of self-evidence is irrelevant to logic, that it makes no sense to ask whether logic is correct or incorrect, and so on. However, now, the work of clarification by means of which the reader is brought to recognize these things, and which serves to liberate us from the idea that logic is a system of truths, that we need to justify logic or that logic depends upon a notion of self-evidence, is undertaken in what Cora Diamond calls a realistic spirit, looking in the right place: at our actual practice of calculating, thinking, and inferring. Thus, Wittgenstein does not abandon his attempt to clarify how signs signify, or to show that how they signify is mirrored in their use, or to show that logic has nothing to do with how the world is, but he undertakes these tasks of clarification in respect of a different object—our actual practice of using language—and in a completely different spirit.³

³ The contrast between the early and later philosophy that I'm focusing on is one that Diamond also emphasizes. Thus, once we recognize the kind of metaphysics that the *Tractatus* does contain,

In the *Tractatus*, Wittgenstein thinks of logical forms of elementary propositions in terms of formal concepts that are presented by means of a variable. A variable is understood as a rule for the construction of a class of propositions; it describes or presents what a class of symbols has in common. Thus, the idealized picture of language as an exact calculus is combined with a temptation to think in terms of logical forms whose essence can be grasped, or expressed, by means of a variable, independently of the content of individual signs. Wittgenstein's turn away from the ideal as an object of investigation, towards language-in-use, goes along with a growing sense that this conception of logical form tempts us to blur over distinctions in how symbols symbolize. His dissatisfaction with the conception of logical form that dominates the *Tractatus* is clearly expressed immediately on his return to philosophy in 1929:

[The subject–predicate and relational] forms are the norms of our particular language into which we project in *ever so many different ways ever so many different* logical forms. And for this reason we can draw no conclusions—except very vague ones—from the use of these norms as the actual logical form of the phenomena described. Such forms as “This paper is boring”, “The weather is fine”, “I am lazy”, which have nothing whatever in common with one another, present themselves as subject–predicate propositions, i.e. apparently as propositions of the same form. (SRLF, pp.164–5)

Thus, the idealized logical forms of a *Begriffsschrift* are now seen, not as capturing what is common to a class of symbols, but as a mode of description of the use of expressions that may simply serve to obscure distinctions in how those expressions are used. Once he has made the turn towards language-in-use, Wittgenstein's earlier recognition of the internal connection between the use of a sign and the kind of symbol that it is is made richer and more concrete. Writing in the summer of 1930, he sums up his transformed conception of logical form as follows:

If someone confronts us with the fact that language can express everything by means of names, adjectives and verbs, we can only say that then it is at any rate necessary to distinguish between entirely different kinds of names, etc, since different

the contrast between the early and the later work is no longer seen in terms of realism versus anti-realism, but in terms of dogmatism versus a realistic approach to the task of clarification. However, while Diamond goes on to stress the methodological aspect of Wittgenstein's later rejection of dogmatic requirements on what descriptions of the use of expressions must reveal, I want also to bring out the underlying continuity of Wittgenstein's philosophical insights into how language functions.

grammatical rules hold for them. This is shown by the fact that it is not permissible to substitute them for one another. This shows that their being names is only an external characteristic and that we are in fact dealing with quite different parts of speech. The part of speech is only determined by *all* the grammatical rules which hold for a word, and seen from this point of view our language contains countless different parts of speech. (*PR*, IX, 92)

It is not that Wittgenstein did not recognize the significance of 'all the grammatical rules which hold for a word', in the *Tractatus*, but that he had not yet perceived the tension between this rich idea of the form of a symbol and the traditional conception of logical form, as something that is expressed by means of a variable. In the later philosophy, there is still the same interest in distinctions between how symbols symbolize, and the same commitment to the idea that how a symbol symbolizes is mirrored in its use, but the approach to the task of making these distinctions clear is transformed by the turn towards the concrete phenomenon of language-in-use. It is no longer a question of expressing what all the expressions of a given logical category have in common, by means of a variable. It is rather a matter of trying to achieve an overview of a whole complicated pattern of use, one that we simply cannot expect to capture fully in an all-comprehending rule for the construction of propositions in which the symbol occurs.

The key notion of the later philosophy is no longer the concept of a variable, but of 'a perspicuous representation' (*PI* 122) of our use of words. Thus, we do not make clear what is essential to a symbol's symbolizing in the way that it does by means of a variable which all the expressions that are substitutable for it have in common, but by means of 'a perspicuous representation' of the whole complicated, shifting pattern of use of the sign. The method depends upon the construction of a wide range of examples, both real and imaginary, which evoke, not merely sentences that contain the expression, but the whole linguistic scene: our life with language. In this way, we aim to achieve an overview of a region of our practice, and to resist falsifying attempts to sum up our use of an expression by means of a precise rule.

In the *Tractatus*, the logical investigation of the nature of a proposition culminates in the general form of a proposition, that is, in a variable that is intended to present what all propositions that represent states of affairs have in common. As we saw in Chapter 10, Wittgenstein sees the general form of a proposition as the one and only logical primitive; it expresses everything we can say a priori about a system of representation that stands in a projective relation to the world: the essence of a proposition is that it is a truth-function

of elementary propositions. In his critical reflections on the general form of a proposition, in the *Investigations*, Wittgenstein does not reject the idea of treating ‘This is how things are’ as a variable that might be used to express a common feature of what we ordinarily call a proposition (*PI* 134). However, he completely reinterprets the logical significance of this idea of our treating ‘This is how things are’ as a propositional variable, within the context of the idea that what he is aiming at in his philosophical investigation is a perspicuous representation of the use of expressions. At *PI* 136, he writes:

At bottom, giving “This is how things are” as the general form of a proposition is the same as giving the definition: a proposition is whatever can be true or false. For instead of “This is how things are” I could have said “This is true.” (Or again: “This is false.”)

‘*p*’ is true = *p*

‘*p*’ is false = $\neg p$

And to say that a proposition is whatever can be true or false amounts to saying: we call something a proposition when *in our language* we apply the calculus of truth-functions to it.

The general form of a proposition is no longer to be conceived as presenting the timeless essence of all representation as such, but rather it may be used to draw our attention to a connection in our language between the concept of a proposition and the concepts of truth and falsity: ‘we call something a proposition when *in our language* we apply the calculus of the truth-functions to it’. Thus, ‘a child might be taught to distinguish between propositions and other expressions by being told “Ask yourself if you can say ‘is true’ after it. If these words fit it’s a proposition.” (And in the same way one might have said: Ask yourself if you can put the words “*This is how things are*” in front of it.)’ (*PI* 137).

Wittgenstein’s aim in the *Tractatus* is to distinguish what is essential to a proposition’s expressing its sense—or to language’s signifying in the way that it does—from what is arbitrary. The idea is that the later Wittgenstein’s interest in a perspicuous representation of the use of expressions of our language does not abandon the aim of his early philosophy, but rather expresses a much deeper understanding of what this aim involves. Thus, the claim is that although his new understanding of how his aim, of making clear how language functions, is to be achieved leads to a profound transformation of the ideas of the *Tractatus*, it does not involve an outright rejection of them. In this way, the later philosophy’s realistic engagement with the myriad of

grammatical distinctions that characterize our ordinary language does not abandon Wittgenstein's earlier idea that what shows itself in the use of expressions is what is essential to their symbolizing in the way that they do, or the idea that what is essential to a symbol's symbolizing in the way that it does cannot be expressed in propositions that can be compared with reality for truth or falsity. Rather, it reinvents it. Thus, Wittgenstein's early understanding of the nature and status of logic—in particular, of the distinction between the propositions of logic and empirical propositions—re-emerges in the later philosophy, where it is purged of the idea of logic as the pure, a priori essence of representation as such.

7. In the *Tractatus*, Wittgenstein's commitment to the absolute purity of logic meant that he simply couldn't recognize anything other than a formal tautology as a proposition of logic. A proposition of logic is one that can be recognized as true on the basis of the symbol alone, and for the early Wittgenstein that meant independently of the application of language, that is, independently of how any particular expression is used in propositions with sense. The idealized (and untenable) picture of logical structure that this leads him to impose as a requirement on the propositions of ordinary language, once they are fully analysed, permits him to identify the propositions of logic—i.e. all the propositions that can be recognized as true a priori—with the truth-functional tautologies. We've already seen that he is quickly forced to recognize that this idealized picture is oversimplified, even in respect of what would ordinarily be called logical inference. Thus, he comes to see that the inference from Fa or $FavFb$ to $\exists xFx$, for example, has nothing to do with tautologies. Similarly, the fact that elementary propositions are not logically independent of one another—that predicates group together in systems—means that he is forced to acknowledge that the logic of the truth-operators is more complex than he'd supposed. All this, as we've seen, leads ultimately to the recognition that 'what we call "sentence" and "language" has not the formal unity that [he] imagined': the general form of a truth-function does not express the essence of a proposition; logical relations between propositions cannot be reduced to truth-functional containment and exclusion. The idea that the totality of propositions that are true a priori is equivalent to the totality of truth-functional tautologies is no longer tenable.

However, even with his complete abandonment of the idea that we can identify a priori propositions with propositions that exhibit a particular formal property, Wittgenstein does not abandon his fundamental idea that

a proposition that is used, on a particular occasion, to express an a priori truth is concerned with how symbols symbolize, and not with what symbols signify. Rather, he simply accepts that we cannot identify a priori which propositions these are, and nor can we dogmatically insist, for any particular a priori proposition, that its a priori status is essential to anything that we would call a language. After the turn towards the concrete phenomenon of language-in-use, Wittgenstein comes to recognize that the distinction he's concerned with is between propositions that are used, on a particular occasion, to say how things are and propositions that are used, on a particular occasion, to draw attention to, or to clarify, how the expressions of our language are used. The idea that what is essential to language's signifying in the way that it does is shown by 'the propositions of logic' gives way to the idea that we use propositions, on particular occasions, to draw attention to an aspect of our use of, or to clarify a grammatical distinction between, the expressions of ordinary language.

Wittgenstein calls a proposition that functions, on a particular occasion, as an a priori proposition a 'grammatical proposition'. The so-called propositions of logic are simply a subset of grammatical propositions. They owe their salience to a certain characteristic universality, that is, to the fact that the rules for the use of symbols that they give expression to are ones that are constantly applied within our everyday lives with language; apart from that, they have no special claim to capture the essence of a proposition. Thus, there is, for the later Wittgenstein, no logical difference between 'Either its raining or its not raining' and 'Nothing is both red and green', as they are used to say something about how particular expressions of our language—'or' and 'not', and 'red' and 'green', respectively—are used.⁴

In the same way, Wittgenstein tries to make it clear that, when a philosopher asserts the proposition 'Sensations are private', he does not thereby attribute a property to sensations. Insofar as the philosopher's intention is to express an a priori truth concerning the essence of a sensation, Wittgenstein

⁴ In a conversation between Wittgenstein and Schlick in 1930, Schlick asks:

Is there not a feeling that the logical constants (the truth-functions) are something more essential than the particular rules of syntax, that for instance the possibility of constructing a logical product ' $p \& q$ ' is more general, more comprehensive as it were, than the rules of logical syntax according to which red and blue cannot be in the same place? For the former rule does not contain anything about colour and place.

Wittgenstein replies:

I do not think there is any difference here. The rules for logical products, etc. cannot be severed from other rules of syntax. Both belong to the method of depicting the world. (*WVC*, pp.80–1)

tries to show that it is not a proposition *about* sensations at all. Rather, the philosopher is using these words to express a grammatical proposition, that is, as a proposition that concerns how the symbols of language are used.⁵ Thus, as the philosopher uses it, the proposition 'Sensations are private' is being used to draw attention, for example, to the fact that it makes no sense to say that I learn of my sensation, whereas it makes sense to say this of others; that others may doubt whether I'm really in pain or only pretending, whereas it makes no sense for me to doubt it; and so on. One of the central themes of the *Investigations* is to try to show that, insofar as a sentence is used to express a grammatical proposition, it does not represent (cannot be compared with reality for truth or falsity): there is nothing that grounds or justifies grammar. Thus, he undertakes to show, in respect of, for example, sensation concepts or concepts of colour, that their grammar isn't grounded in the nature of things. The grammar of our expressions is what is essential to their signifying in the way that they do; it is what gives particular propositions—'I have a pain in my right shoulder'—a sense that is true or false. The grammar of an expression is determined by a practice of employing it, by the application that is made of it. Within the context of this practice, the question of the truth or falsity of particular propositions can arise, but there is no further question of whether the grammar is correct or incorrect. The emphasis on practice, and on the application of particular expressions, is fundamental to the turn that divides the later from the early philosophy, but the concern to reveal the autonomy of grammar echoes Wittgenstein's earlier concern to show that logic does not represent—that 'logic takes care of itself'—and it represents a deep continuity of philosophical purpose.⁶

8. So far I have been concerned to draw attention to the way in which the *Investigations* can be seen as a virtual re-enactment of the project of the *Tractatus*. Even despite Wittgenstein's complete overcoming of the myths of determinacy of sense, of logic as the essence of representation, and of language as a calculus operated according to precise rules, there is a clear sense in which the *Investigations* is a development, rather than an abandonment,

⁵ I discuss these ideas more fully in McGinn, 1997, chaps. 4 and 5.

⁶ This is not to say that Wittgenstein (early or late) is an anti-realist, i.e. that he is putting forward the view that we can give no sense to the idea that there are facts about the world that justify or underlie the grammar of our language. There is no suggestion that Wittgenstein is putting forward an argument to show that there are no facts that justify the grammar of our language, or to show that there is something we cannot do. Rather, Wittgenstein is seen to be concerned to make clear distinctions that are internal to our practice of using language; the result of the clarification is that the question of whether the grammar of our language is justified by the facts disappears completely.

of ideas of the *Tractatus*. Moreover, the turn towards language-in-use that defines Wittgenstein's later philosophy is clearly one that is invited by the connection that he makes in the *Tractatus*, between the meaning of a symbol and its use in propositions with sense. The concept of use that emerges after the turn is, as I've already noted, much richer and more concrete than the concept of use, with its implicit connection to a concept of representation, that operates in the *Tractatus*. However, it is clear that, despite the difference, this central strand of Wittgenstein's later philosophy can be seen to have its roots in what I argued was one of the central achievements of the *Tractatus*. However, it is also the case that there is a conception of meaning present in the *Tractatus*—the idea that the meaning of a word is the object that is correlated with it—that is in direct tension with the idea of meaning as use, and of which Wittgenstein is deeply critical in the *Investigations*. In Chapter 1, I suggested that both voices of the opening dialogue of the *Investigations* have their origin in the *Tractatus*: the evolved form of the strand that connects meaning and use is used to defeat the illusion that the meaning of a word is something that is correlated with it. Thus, there is a tension in Wittgenstein's treatment of the concept of meaning in the *Tractatus*, which he only appreciates later, and which is resolved in the *Investigations*. However, even here, I want to argue, we can see important continuities of philosophical purpose that bring the early and the later philosophy closer than they seem at first sight.

Wittgenstein connects the idea of meaning as something that is correlated with a word with 'a primitive idea of the way language functions', or with 'the idea of a language more primitive than ours' (*PI* 2). It is, he suggests, the idea of a language in which all the words function like names. The 'Slab', 'Block' language of *PI* 2 is intended to be an example of a language for which this description is correct. Although these expressions are clearly not examples of the simple indefinable expressions of the *Tractatus*, they might nevertheless be considered as the basic elements of representation in the language-game of *PI* 2. In the dialogue that now develops, Wittgenstein clarifies the connection between the meaning of the words of this primitive language and their role within the activity of building. He then uses this to reveal the emptiness of the idea that there is, in addition to this conception of meaning as use, a conception of meaning as something that is correlated with a word. Even if it is the case that, as a result of training with the language, a child comes to form an image of a certain kind of building stone whenever he hears the order 'Slab!', that image is not the meaning of the word 'slab'. He tries to show that whatever comes before someone's mind when he hears a word and

understands it is just another sign, and the question of its application arises all over again. If the same picture comes before the minds of two speakers when they hear a word, but they go on to apply it differently, then we would not, in general, say that they mean the same thing by the word. It is true that we use the picture, or the formula, that comes before someone's mind when he hears a word as a criterion of what he means by it, but only against the background of a shared practice of employing this picture, or this formula, which serves to fix its application (meaning). By means of a whole range of examples, Wittgenstein tries to get the reader to see that the whole idea of meaning as something that is correlated with a word, as something that accompanies the saying of the word and fixes its future use, is a chimera.⁷

9. Wittgenstein's conception of simples in the *Tractatus* is clearly closely connected with the conception of meaning as something that is correlated with a word: simple objects just are the meanings that correspond to the simple, indefinable signs that are the constituents of elementary propositions. To the extent that the idea of simples depends upon the illicit concept of meaning as something that is correlated with a word, it collapses along with the chimerical concept of meaning on which it rests. However, even though it is expressed in terms of the illicit concept of meaning, the argument for simples that Wittgenstein gives in the *Tractatus* arises out of a commitment to the autonomy of language, that is, to the idea that whether a proposition has sense cannot depend on whether another proposition is true. The argument for simples is part of Wittgenstein's attempt to show that we do not have to worry about language, that whether a proposition has sense depends only on whether a certain projection has been made, that the relation between a proposition and the situation it represents is internal or essential and does not depend on anything hypothetical. I want to argue that the concern to show that the meaning of the expressions of our language is independent of anything hypothetical continues in the later philosophy. What we find is that Wittgenstein does not reject the impulse that leads to the idea that '*a name ought really to signify a simple*' (PI 39), but that he responds to it differently. The turn towards language-in-use means that we have only to look at the application of language to see how language takes care of itself. If we are

⁷ The role of practice is not here being used in a constructive account of what constitutes the correct application of a rule; the claim is, rather, that the normative concept of following a rule is intelligible only against the background of a custom or practice of going by a rule. I discuss these ideas more fully in McGinn, 1997, chaps. 2 and 3. The interpretation I'm presenting receives its classic expression in McDowell, 1984.

tempted to think that the autonomy of language calls for words that stand for simples, then ‘we must focus on the details of what goes on; must look at them *from close to*’ (PI 51).

Wittgenstein’s discussion of simples in the *Investigations* begins by presenting a version of his own earlier argument:

But if “Excalibur” is the name of an object, this object no longer exists when Excalibur is broken in pieces; and as no object would then correspond to the name it would have no meaning. But then the sentence “Excalibur has a sharp blade” would contain a word with no meaning, and hence the sentence would be nonsense; so there must always be something corresponding to the words of which it consists. So the word “Excalibur” must disappear when the sense is analysed and its place taken by words which name simples. It will be reasonable to call these words real names. (PI 39)

The first point that Wittgenstein makes in response to the argument is that ‘the word “meaning” is being used illicitly if it is used to signify the thing that “corresponds” to the word’ (PI 40). The thing that corresponds to the name is not the meaning of the name, but its bearer. The meaning of a name is its role in the language-game. We can imagine a language-game in which a name becomes meaningless if the object that corresponds to it ceases to exist. In PI 41, Wittgenstein expands the language-game of PI 2 to include names of tools, and imagines that, if the tool corresponding to the name ‘*N*’ is broken, then a speaker who is given an order that includes the name ‘*N*’ ‘will stand there at a loss’. In these circumstances, we might say that ‘*N*’ has become meaningless: it no longer has a role in the language-game. However, this is by no means necessarily the case. It might be the case that if someone is given an order containing the name ‘*N*’, then he has to give the sign that shows that the tool is broken. In this language-game, Wittgenstein suggests, the sign ‘*N*’ still has a role—i.e. it still has a meaning—even when the tool that corresponds to it no longer exists. And we can even imagine a language-game in which there is a role for names of tools that have never existed:

But has for instance a name which has *never* been used for a tool got a meaning in that game?—Let us assume that ‘*X*’ is such a sign and that *A* gives this sign to *B*—well, even such signs could be given a place in the language-game, and *B* might have, say, to answer them too with a shake of the head. (One could imagine this is a sort of joke between them.) (PI 42)

A sign that has a role in the language-game has a meaning: its meaning is its use in the language-game. There is nothing outside language that determines

whether a sign can be given a meaning; it is only a question of the application that is made of the sign.

Our language is clearly one in which we use names—particularly, the names of people—both in the absence of the bearer and when the bearer has ceased to exist. The name's having a meaning does not depend upon the presence, or even on the continued existence, of its bearer. But in that case, what is the connection between a name and its bearer? What does it mean to say that the bearer 'corresponds' to the name? Wittgenstein raises the question in *PI* 37: 'What is the relation between name and thing named?' And he responds to it by directing our attention to our practice of using names: 'Well, what *is* it? Look at the language-game of (2) or at another one: there you can see the sort of thing this relation consists in.' Wittgenstein does not, of course, attempt to say what the essence of this relation is. Rather, he presents aspects of our practice of using names that give content to the idea of a thing's corresponding to a name. For example, the fact that a picture of the thing named comes to mind when we hear the name, that the thing named may have the name written on it, that—in the case of people's names—the bearer of the name responds when the name is called, that we explain the meaning of a name by pointing to the thing named and pronouncing the name, or—in the case of people's names—that there is a ceremony in which the bearer is given a name which he then employs in social life, and so on. It is familiar facts such as these, Wittgenstein suggests, that give content to the idea of a thing's corresponding to a name, and not 'a *queer* connexion of a word with an object' (*PI* 38). However, even these familiar facts have the significance they do only against a background of employing the name in language-games. The facts that give the idea of correspondence between a name and thing named its content are not what make a sign into a name; rather, the role of the name in a language-game is what makes it possible to describe these facts in terms of the concept of setting up a relation between a name and an object:

We may say: *nothing* has so far been done, when a thing has been named. It has not even *got* a name except in the language-game. This was what Frege meant too, when he said a word has meaning only as part of a sentence. (*PI* 49)

However, this is not on its own enough to dispel the puzzlement that leads us to think that a name must really signify a simple. For surely, in the case of a name that has a bearer, the bearer is what a proposition containing the name is about. And we could not have a proposition that is about the bearer of a name, if the bearer does not exist. Insofar as the role of a name is to signify its

bearer, then a name that stands for a bearer could not function as the name that it is—could not have the meaning that it has—if the bearer did not exist. A commitment to the autonomy of language may once again make us feel that, if without the object corresponding to it a sign could not be the symbol that it is, then what corresponds to the sign must be something for which the question of existence or non-existence does not arise. Wittgenstein's idea of simples as elements of representation is an expression of this sense that the possibility of expressing propositions that stand in an internal relation to the state of affairs they represent depends upon there being names that are guaranteed to have something corresponding to them. Thus, the object that corresponds to a real name—i.e. to names that have objects corresponding to them—must be such that they cannot be destroyed, that is, must be such that the question of existence or non-existence makes no sense. And clearly this does not apply to the objects that correspond to the names of ordinary language.

What we find, once again, is that Wittgenstein does not reject these reflections outright: there is something right in what is being said, but a false construction is being placed on it. Wittgenstein gives expression to a version of the argument at *PI* 55:

“What the names in language signify must be indestructible; for it must be possible to describe the state of affairs in which everything destructible is destroyed. And this description will contain words; and what corresponds to these cannot then be destroyed, for otherwise the words would have no meaning.” I must not saw off the branch I am sitting on.

Wittgenstein begins to gesture at what is wrong and what is right about this argument as follows:

One might, of course, object at once that this description would have to except itself from the destruction.—But what corresponds to the separate words of the description and so cannot be destroyed if it is true, is what gives the words their meaning—is that without which they would have no meaning.—In a sense, however, this man is surely what corresponds to his name. But he is destructible, and his name does not lose its meaning when the bearer is destroyed.—An example of something corresponding to the name, and without which it would have no meaning, is a paradigm that is used in connexion with the name in the language-game. (*PI* 55)

We have simply got the wrong idea if we think that if the bearer of a name is destroyed, the name loses its meaning. In our language, names are used in the absence of their bearers, and their role in the language-game does not depend

upon the continued existence of the thing that corresponds to them. But yet there is something right in the thought that a name that stands for a bearer would not be the symbol it is if there was no bearer corresponding to it. If Wittgenstein had never existed, then the name 'Wittgenstein' would not have the role in our language-game that it does have; if nothing existed that is red, then the word 'red' could not have the meaning that it does; and so on. Wittgenstein's response is not to abandon his commitment to the autonomy of language, but to look more carefully at the role of the object that corresponds to a name in our practice of using names. If a name would have no meaning—i.e. no use in the language-game—without the object corresponding to it, then the object is used as a paradigm in the language-game in which the name has a role. Thus, the ostensive definition of a name, which we give on a particular occasion and in which we point at an object while pronouncing the name, employs the object as an instrument of language.⁸ The ostensive definition, Wittgenstein suggests, can be seen as the expression of a rule for the use of a sign, and the object that we gesture towards in giving the definition is used as a means to express the rule. In this case, the object itself is employed within the symbolism: it is 'not something represented, but . . . a means of representation' (*PI* 50). The idea that the word would not have a meaning without the object corresponding to it is shown to amount to nothing more than the following mundane thought:

And to say "If it did not *exist*, it could have no name" is to say as much and as little as: if this thing did not exist, we could not use it in our language-game. — What looks as if it *had* to exist, is part of the language. It is a paradigm in our language-game; something with which comparison is made. And this may be an important observation; but it is none the less an observation concerning our language-game—our method of representation. (*PI* 50)

The idea that in an ostensive definition of a name, the object itself becomes part of the symbolism is another way of expressing the point that anything that is correlated with a sign is itself another sign, for which the question of application arises all over again. The ostensive definition of a name by means of a paradigm or sample does not serve to fix the meaning—i.e. the use of the name—for how the sample is used, what counts as an object's being 'the same' as the sample, is shown only in the practice of applying the definition. Whether a name that is ostensively defined corresponds to a person, a colour,

⁸ cf. *Philosophical Remarks*, p.78: 'I will count any fact whose obtaining is a presupposition of a proposition's making sense, as belonging to language.'

a shape, and so on depends on the kind of comparison that is to be made with the object that serves as a paradigm. The significance of the paradigm is shown by how we go on to apply the definition; the paradigm does not on its own determine its use. However, if we lose a paradigm, then we are no longer able to play a particular language-game with it. If the bearer of the name ‘*N.N.*’ dies and is forgotten, if all red things are destroyed and we forget the colour, then the names ‘*N.N.*’ and ‘red’ will become meaningless: we shall no longer be able to play the language-game with them.⁹ In this way, a name may lose its meaning for us. However, all this is to say something about the language-game itself; it is not to make the meaning of a name depend on something outside language.

Wittgenstein’s response to the intuitions that lead to a sense that a name must really signify a simple has a negative and a positive aspect that I’m suggesting is characteristic of his response to the ideas of the *Tractatus*. On the one hand, he is certainly out to show that the idea of a simple object—something for which the question of existence or non-existence does not arise—is a philosophical chimera. Thus, he tries to show that the very idea of an absolute simple, something that could mark the end of analysis, is completely empty. The question whether something is simple or composite makes sense only within the context of a particular language-game. Similarly, the idea of an object for which the question of existence or non-existence does not arise is an illusion. Although it clearly makes no sense to say that red is destroyed, ‘we quite readily say that a particular colour exists; and that is as much as to say that something exists that has that colour’ (*PI* 58). On the other hand, he tries to show that the autonomy of language does not depend upon this philosophical chimera that we’ve constructed. By attending to the familiar facts of our practice of defining and employing names, we gradually come to see that language does not need the support that we set out to give it. We come to see that ‘nothing out of the ordinary is involved’ (*PI* 94), our practice of using language, just as it stands, takes care of itself. Although our language-games depend upon the facts in all sorts of ways, whether a sign is

⁹ The name’s becoming meaningless is essentially a matter of its ceasing to have a role in our life with language. Wittgenstein’s discussion of the name ‘Moses’ (*PI* 79) suggests that he believes that names for which, if there ever was a paradigm, that paradigm plays no role at all in our language, can nevertheless still have a meaning. In these cases, the meaning depends upon the name’s embedding in a system of descriptions, which, in some fairly unsystematic way, provide a definition of the name. The remarks on the notion of a paradigm, which I’ve just been discussing, suggest that he would not treat the names of living people with whom we are in contact, and whose names are defined ostensively, in the same way.

a symbol in our language, and if so, what symbol it is, depends only upon its role in the system, that is to say, in the 'whole consisting of language and the actions into which it is woven'. One of the central tasks of the *Investigations* is to show us what this idea—i.e. the idea that a word has a meaning only against the background of a practice of using it—amounts to. In the same way, questions that he simply left unexplored in the *Tractatus*—What is it to be master of a rule? What is it to hear a word and understand it? What is it to mean a word in one way rather than another? and so on—now become an important focus for investigation.

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