A critical examination of Wittgenstein's Tractatus

Edwin B. Allaire Jr.
State University of Iowa

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A CRITICAL EXAMINATION OF WITTGENSTEIN'S TRACTATUS

by

Edwin Bonar Allaire, Jr.

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Chairman: Professor Gustav Bergmann
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Chapter I

Introduction

Wittgenstein's *Tractatus* is one of the most important works in philosophy in this century. It states with impressive boldness the dominant theme, or, more aptly, the cardinal thesis, of recent and contemporary philosophy: (traditional) philosophical propositions are "nonsense." Furthermore, it completes the linguistic turn initiated originally by Frege and Russell. In thus completing the turn Wittgenstein in the *Tractatus* set the style of contemporary analytic philosophy. The style, or, method, is that of linguistic analysis, the overall purpose of which is to establish the thesis that (traditional) philosophical propositions are (linguistic) nonsense. Nor, of course, is the importance of the *Tractatus* diminished by Wittgenstein's eventual rejection of it. On the one hand, he did not abandon either the thesis or the linguistic method, but only the kind of linguistic analysis he proposed initially. On the other hand, the preoccupations of the later Wittgenstein are determined by the views of the earlier. As he himself informs us in the Preface to the *Investigations*, the later ideas can "be seen in the right light only by contrast with and against the back-
ground of my old way of thinking."¹ A natural question, therefore, and one of considerable historical significance, is: What was the old way of thinking and why was it unsatisfactory? This study proposes to answer those questions.

Until recently the Tractatus, though immensely influential, has received scant critical attention. Four plausible reasons come to mind. One. Only forty years have passed since its publication. Two. The work is obscure, except for some lucid passages on the philosophy of logic. The obscurity derives from its many veiled references to Frege and Russell and from the cryptic character of its propositions, some of which are repeated to the point of perplexity. Three. At best, the work is merely a program. Moreover, it appeared at a time of considerable philosophical ferment, a time when the traditional gambits had lost their charm. Thus, the Tractatus found a rather sympathetic audience. For it offered an alternative to the traditional style of philosophy. Many philosophers rather than challenge its program felt its influence, taking what they could use and ignoring the rest, e.g., the mysticism. Two major groups so influenced were the Vienna Positivists and the Logical Atomists; the former numbering such men as Carnap, Schlick, and Waismann; the latter, Russell, Ramsey, the early Ryle, and the early Wisdom. Both groups included original thinkers.
Thus, neither stopped merely to criticize the *Tractatus.*

Four. Wittgenstein's own rejection of the program occurred soon -- within fifteen years. Those that followed him, and there were many, therefore quite naturally lost interest in the work.

The *Tractatus,* then, had its influence but not its critics. This leads one to emphasize a distinction which is sometimes overlooked. On the one hand there is the *Tractatus,* on the other, its influence. Needless to say, the latter is a dubious guide to the former. Some recent examinations of the work have been more concerned with "the sort of interpretation...which was accepted in the period...and which has therefore been of historical importance and influence" than what Wittgenstein himself was attempting to do. That, of course, is a perfectly legitimate approach. It is not, however, the one which I shall take. The primary aim of this study is to analyse the text in its own right. For, as Wittgenstein himself has suggested, such an analysis will throw light on his later work, not to mention the light it will shed on the difficult and profound *Tractatus.*

Since the philosophy of the later Wittgenstein is influenced by the earlier, one may say that the *Tractatus* had both a positive and negative influence; the former felt by the Positivists and the Atomists; the latter, by the later Wittgenstein. I say negative in Wittgenstein's case because the
Investigations is in many ways his attempt to expunge what he considered to be the mistakes of the Tractatus. More precisely, then, the main concern of this study is the text and its negative influence. However, that is not its limit. The study is also critical.

The philosophy of the later Wittgenstein is, I believe, inadequate. The roots of the inadequacy are, as I shall try to demonstrate, in the Tractatus. An example may help to make this clear. The picture theory of language as formulated in the Tractatus is a hybrid of philosophical analysis by means of an artificial language and a psychological theory of linguistic behavior. That is, the early Wittgenstein believed that the artificial language sketched in the Tractatus as a candidate for the ideal language not only dissolved the philosophical problems but also contributed to the psychology of communication. For instance, he believed that the interpretation of an artificial language had to follow the pattern of a child's learning behavior. Hence, since the interpretation of an artificial language as employed for philosophical analysis depends upon, or, more precisely, appeals to, the reference theory of meaning, Wittgenstein, upon realizing that the learning of a natural language is infinitely more complicated than the interpretation by means of a natural language of an artificial one, abandoned the notion of an ideal one. In this situation, rather than prune the reference theory of meaning
of some of its early absurdities (to which he himself contributed), Wittgenstein rejected the notion of an ideal language. In its stead he embraced the use theory of meaning and held that the task of analytic philosophy exhausts itself in the description of the ordinary use of natural languages. Thus, Wittgenstein's early confusion, manifest in certain hybrid ideas of philosophical and psychological analysis, eventually led him to considerations which are primarily psychological. In other words, from where I stand, he eventually discarded the wrong part of the hybrid. The inadequacy of the later method is that the description of ordinary language it attempts yields but little philosophical clarification. Such descriptions are primarily the psychologist's task. From where I stand as well as the earlier and, professedly, even the later, Wittgenstein stand, "psychology is no nearer related to philosophy, than is any other natural science." How Wittgenstein came to be ensnared in such a predicament I shall try to show. Here I merely wished to illustrate what I meant by saying that the roots of the inadequacy of the later philosophy are in the earlier.

This study, then, attempts to give more than just an exposition of the doctrines so cryptically propounded in the Tractatus. It also attempts to criticize the early shortcomings and delineate several of their structural and historical connections with the main doctrines of the Investigations.
In the next two chapters I shall examine and criticize two of the later views; namely, the notion of grammatical truth and an implicit doctrine concerning the ontological status of mind. In the later chapters, which for the most part deal with the Tractatus, I shall emphasize the ancestors of both views, exhibiting the original defects of each.

The critical framework to be employed in this study is, ironically, an outgrowth of certain views propounded in the Tractatus. That is not the limit of its debt, though. It also owes much to Russell, Moore, and Carnap. The label most often associated with the framework, or, if you will, position, is "the ideal language method." Since it is frequently mistaken for what it is not -- a mere rehashing of the Tractatus -- it will be prudent to discuss it briefly. At the same time I will contrast it with the sort of analysis proposed by the later Wittgenstein. That will provide opportunities for pointing to the limitations of the latter and for making clear the direction of my criticism. Before engaging in that task I wish first to make some general remarks on the sources to be used and on the organization of the study.

The Tractatus, notwithstanding the purposeful, numerical arrangement of its propositions, is obscure. In fact, its excruciating economy as well as its many veiled references to certain problems that preoccupied Frege and Russell make
it almost unintelligible in itself. Some recent commentators, notably Anscombe, have tried to surmount this difficulty by examining the Tractatus in the light of Frege and the early Russell. These materials are extremely helpful and cannot be ignored. On the other hand, they must be used carefully. Wittgenstein's own writings shed much more light on the work. They reveal Wittgenstein's intentions, something which neither the works of Frege nor those of Russell can do. In particular, four of Wittgenstein's works are invaluable in that respect. They are: (1) "Notes on Logic", (2) "Remarks on Logical Form", (3) The Blue and the Brown Books, and (4) Philosophical Investigations. It is interesting to note that Anscombe's introduction to the Tractatus virtually ignores all four. As I shall show, her book suffers for it, especially on such issues as nominalism and the status of mind.

(1) is merely a notebook and might aptly be termed "a commonplace book." It introduces one to Wittgenstein's early criticisms of the views of Frege and Russell, or, at least, his criticism of these views as he saw them -- the two not always coinciding. The topics which most concern him are: the ontological status of the True and the False, the doctrine of naming, the analysis of belief, and the ontological status of "propositions," i.e., Fregean senses. All of them, of course, are central to the Tractatus. Moreover, certain pass-
ages in the Tractatus occur verbatim in the "Notes" with the added advantage of indicating by the context in which they occur the problems which generated them. Thus, they become less opaque.

(2) is the famous 1929 paper. It is the only work other than the Tractatus published during Wittgenstein's lifetime. It is of considerable aid in understanding his stand on two major issues; namely, the analytic-synthetic distinction and the nominalism-realism problem. Both issues, incidentally, play a crucial role in the eventual rejection of the Tractatus. The 1929 paper is the key to that rejection.

(3) and (4) are indispensable because, as has already been remarked, the later writings of Wittgenstein are in many ways a confession of what he considered his early blunders and an attempt to understand why he made them. Accordingly, numerous passages in both (3) and (4) refer explicitly to doctrines advanced in the Tractatus. Some, in fact, are merely more lucid statements of those early doctrines. The later Wittgenstein is struggling, in a way not unlike Moore, to state precisely what he formerly believed. With him, precision is, of course, a preliminary to "therapy." One might even say that the early Wittgenstein is the principal subject of the later's therapy.

This study consists of five sections: (I) the later Wittgenstein, (II) the picture theory of language, (III) the
nominalism-realism issue, (IV) mind, and (V) the rejection of the Tractatus. In (I) I shall briefly compare the ideal language method with that of the later Wittgenstein and examine his later stand on two major issues; mind and analyticity. (II), (III), and (IV) constitute a critical exposition of certain themes in the Tractatus. Those themes are: the picture theory, nominalism, analyticity, the ontological status of logic, and mind. (V) treats those issues which eventually caused Wittgenstein to reject the Tractatus. Accordingly, the last section merely attempts to weave the previous ones into bold structural pattern depicting the rise and fall of Wittgenstein's philosophy.
Chapter II

Remarks on Method

Some words are used both philosophically and commonsensically. All the words in the following sentences are used commonsensically: (a) Gold and silver are substances, (b) Molecules are composed of atoms, and (c) There is no square between 1 and 4. The italicized words in the following sentences are used philosophically: (d) A substance is a continuant, (e) Composite things do not exist, (f) There are no numbers. Not surprisingly, this distinction is the cornerstone of contemporary analytic philosophy. For, if one is to hold that philosophical propositions are nonsense, then one must be able to single out the philosophical propositions. However, the distinction need not be stated, as above, linguistically. Moore, for example, calls upon the same difference when insisting that commonsense is inviolable. In so doing he implicitly invokes a distinction between philosophy and commonsense, and does so without the aid of linguistic formulations.

How does one tell when a word is used philosophically? That is difficult to say. Some uses seem obviously philosophical, e.g., 'exist' and 'there are' in (e) and (f), respec-
tively. Others are more difficult to detect. Ryle's suggestion that with some experience one can "smell" the difference is aphoristically quite satisfactory. At least, neither the ideal language method nor the method advocated by the later Wittgenstein explicitly proposes a criterion for distinguishing between the two uses. However, not all philosophers have refused to put forth a criterion. For example, many philosophers found it difficult to resist the temptation to make the verification theory of meaning into a criterion. For, aside from the fact that the mistaken need for a criterion is thus filled, if to be meaningful is to be verifiable, then the claim that philosophy is nonsense (meaningless) is immediately made good. I just called the need for a criterion mistaken. Without analysing that mistake, I merely notice that the demand for a criterion of this kind is in fact parried by most contemporary philosophers. Of what is justified in this demand they take care at different places in their respective systems. Two questions, however, are not and cannot be so parried. (1) What were the traditional philosophers talking about? (2) How is one either to uncover, or, recover, what they meant or show that they were merely speaking nonsense?

According to the later Wittgenstein traditional philosophers were uttering either grammatical truths or grammatical
nonsense. This is his answer to (1). An example of a grammatical truth is Descartes' assertion that all bodies are extended. An example of grammatical nonsense is Descartes' assertion that in dreams we are deceived. According to the later Wittgenstein, a (traditional) philosophical proposition can be shown to be in one or the other of the two categories by ordinary language analysis, or, more specifically, by describing how ordinary language is being used. This is his answer to (2). Those answers are the negative side of the method. The positive, or, therapeutic, side is more subtle. If upon analysis one finds that a given proposition is a piece of grammatical nonsense, one must exhibit a grammatical analogy which will explain why it has the (specious) character of depth, and, thus, why the philosopher was led to utter it.

What is a grammatical truth? Consider again the sentence 'All bodies are extended' which is said to be one. According to the later Wittgenstein, the sentence, unlike 'No bird flies faster than 1000 mph', is not a generalization about a class of objects. Rather, it is a statement about how language is used. That is, the words 'body' and 'extended' have no uses (in descriptive discourse, at least) such that the former has a context which the latter does not. Or, to put the matter more strongly, no one who knows how to use the
words 'body' and 'extended' would upon hearing the sentence 'All bodies are extended' need to look at the world in order to know that it is true. A grammatical truth, then, has a peculiar status. Rather than telling us about the world it tells us about how language is used in describing the world. That is not its only peculiarity, though. A grammatical truth is also held to be, in some sense of the word, a rule, and is said to reflect an agreement. In what sense this is so need not detain us here. Later I shall consider the notion and its defects in more detail. For the moment I merely wish to note how the phrase 'grammatical truth' is used. For, it is one of the basic terms of Wittgenstein's later method.

What is a grammatical analogy? Consider again the sentence, 'In dreams we are deceived'. It is claimed to be a piece of grammatical nonsense. That means that the ordinary uses of the words 'dream' and 'deceive' are such that they cannot be conjoined as in the instanced sentence. A grammatical analogy is a "perspicuous representation" of similar forms of language which may deceive the unwary by providing a transition in small steps from sense to nonsense. That is, in the case at hand, the grammatical analogy would be what the Wittgensteinians call a map of the uses of 'dream' and 'deceive', exhibiting the possible paths that might have led one to assert the nonsensical, 'In dreams we are deceived'. 
The method of the later Wittgenstein is built around
the doctrine that "the meaning of a word (in a large number
of cases) is its use." In this context the word 'use' means
ordinary use, i.e., how the word is used outside the philoso-
pher's study, how it is used in those sentences which are
deemed nonphilosophical. The philosopher's task is to de-
scribe that use, not to legislate it. For, "philosophy in no
way interferes with the actual use of language; it can in the
end only describe it." Thus, our philosopher in dissolving
the philosophical problems cannot merely outlaw them by pre-
scribing how language ought to be used. Rather, by carefully
describing how it is ordinarily used, he must show that the
philosophical problems do not arise as long as it is so used.
The notion of use which underpins the method is, of course,
extravagantly broad. It encompasses not only linguistic be-
havior, it encompasses all behavior. To paraphrase Wittgen-
stein, to describe a language is to describe a form of life.
Accordingly, in analysing a sentence such as 'In dreams we
are deceived' one might, and in fact must, describe how one
behaves and others react when one says that he has been de-
ceived.

In this way Wittgenstein makes good his claim that (tra-
ditional) philosophy is nonsense. First, he distinguishes
ordinary and philosophical uses. Second, he claims that the
meaning of a word is its (ordinary) use. Third, he shows by
describing the ordinary uses that philosophical propositions
cannot be stated if only these are available. Finally, he
attempts to take the sting out of the apparent circularity by
exhibiting grammatical analogies, the purpose of which is to
delineate the tempting, though illicit, paths which lead from
sense to nonsense. That is, he attempts to show why one, if
unwary of the grammatical subtleties, might be deceived into
asserting philosophical propositions.

The ideal language method, like Wittgenstein's, begins
with the distinction between philosophical and ordinary (com-
monsensical) uses. Its answer to (1) marks the difference.
According to this method, traditional philosophers were at-
ttempting to give voice to certain basic facts and to show what
is and what is not incompatible with them. For example, be-
hind traditional nominalism stands the basic fact that one
never sees red alone, or senses any other property alone,
but always something which exemplifies it. Behind traditional
realism stands the basic fact that we frequently see distinct
things which exemplify, say, the same (shade of) color. The
traditional dialectics in which these two positions are irre-
concilable must thus be analyzed. For, the two facts are
not as such irreconcilable. Facts never are. The traditional
dialectics must, therefore, be spurious. To uncover the spur-
iousness of this and similar dialectics is the task the method sets itself.

How is the task to be accomplished? The first step is to construct an artificial language, L, or rather, the schema of one. For, L, of course, is not a language to be spoken. It is intended to picture the world, if I may so express myself. L is so designed that all indicative sentences can, in principle, be transcribed in it. In this and only this very special sense is L said to describe the world. The second step is to explicate the philosophical uses by speaking commonsensically about the syntactical and semantical features of L. Third, the spurious character of the traditional dialectics is exhibited.  

The construction of L proceeds as follows. First, the syntax of L is established purely geometrically, or, as is sometimes said, syntactically. That is, the formation rules of L depend upon the geometrical shapes of the signs and not on what they may eventually refer to. Second, L is interpreted. This means that L is supplemented with constants which are used to refer to (stand for) things with which we are acquainted, e.g., colors, tones, and so forth. Having established the syntax of L and interpreted it, our philosopher must show two things. (1) All indicative (descriptive) sentences of ordinary language can (in principle) be transcribed in L. (2) L, so constructed and interpreted,
allows for the explication of the philosophical uses, and, hence, for the dissolution of all the traditional dialectics, e.g., the dialectics between realist and nominalist.

The ideal language philosopher, of course, takes no (traditional) position. That is, his purpose is not to defend any traditional position. Rather, he defends all by recovering the commonsense core of each, i.e., the basic fact standing behind each. The dissolution of the spurious dialectics which hold the various positions in opposition is achieved by distinguishing and explicating the philosophical uses. This is done by speaking about the syntactical and semantical features of L. For, more often than not philosophical uses are intended to express what can only be expressed by speaking about speaking. Yet, the traditional philosophers often ignored this distinction. The following illustration will help to make this clear.

Recently, Bergmann has proposed an analysis of Bradley's famous connundrum, which, according to Bergmann, stems from a confusion between speaking and speaking about speaking. Consider, 'This is blue'. Assume that 'this' and 'blue' refer to an individual and a character, respectively. They are said to stand in the exemplification relation which is represented by the predicative is. If, in a syntactically constructed language, that relation is represented by a term then one is confronted by Bradley's regress. One would then
need a relation to relate the exemplification relation to the particular and the character. The difficulty disappears if we realize, that, as one says, exemplification merely shows itself, which means that it can and, in a certain sense, must be represented by certain geometrical features of the language rather than by the appearance in it of a symbol. However, one must not take this to mean that it cannot be spoken of at all, i.e., that it is absolutely ineffable.

It merely means that it cannot be mentioned in L, not that it cannot be spoken of by speaking about L. As we shall see, Wittgenstein’s ineffability thesis stems from a similar insight. Unfortunately, failing to appreciate the notion of a metalanguage, he formulated the thesis in the most extreme, absolutistic terms.

We see, now, how the ideal language philosopher makes good the claim that traditional philosophy is nonsense. First, philosophical statements, i.e., statements containing at least one word used philosophically, cannot be transcribed in L. They can only be explicitated by speaking about L. Second, the ideal language philosopher takes the sting out of the apparent circularity by analyzing the traditional arguments, showing that they are pseudo-arguments. For, on the one hand, they bring into conflict basic facts, and, on the other, derive their plausibility from the ambiguities of the philosophical
uses. For example, 'independent' plays a prominent role in
the nominalism-realism controversy. Yet, the word has many
philosophical uses. When they are distinguished and expli-
cated it is seen that the two positions, or, more accurately,
the two commonsense cores, are not in conflict.

Now for three comments.

1. Upon the ideal language method L is descriptive.
This is a commonsensical use of 'descriptive' and merely means
that the only sentences which can be transcribed in L are
those which are ordinarily called indicative. Some philo-
sophers object to this limitation, claiming that ordinary
language contains many (nonindicative) sentences which are
nevertheless meaningful: e.g., 'The Lord is my shepherd'
and 'The fog comes in on little cat's feet'. A defender of
the method answers as follows: First, L is not proposed as
the "logic of ordinary language." It is proposed as a des-
cription, in the limited sense, of the world. That is, L
would describe all uses of language as well as the objects
in the world. L would contain, therefore, schematically,
the reconstruction, say, of someone uttering the sentence
'The Lord is my shepherd' and the various responses on the
part of the audience. Thus, if the various uses of 'meaning'
are distinguished, no difficulty arises. For, on the one
hand, 'The Lord is my shepherd' is not descriptive in the
sense that it does not refer to a state of affairs as does 'London is east of New York'. Yet, the sentence has a use, i.e., people utter it and behave in sundry ways to it. In this sense it is meaningful. Thus, its use and the behavior associated with that use are reconstructed in L. Or, to say the same thing differently, the words would be represented in L but not the objects purportedly referred to by them, for one is never acquainted with all of them.

Nor, of course, is Wittgenstein's method any different in this regard. It, too, describes the uses of language. Some uses, as one says, are referring uses; some are not. In the former cases objects are associated with words; in the latter, not. Thus, this distinction is no different than the one indicated above. In describing the uses of language, then, Wittgenstein's procedure is built on descriptive sentences in the sense that he merely describes language on the one hand, and, on the other, that in distinguishing the uses of language he is forced to rely most heavily on descriptive sentences. Or, to put it a bit captiously, Wittgenstein pictures the uses of language; the ideal language philosopher pictures the world. Therefore, all that differentiates the methods in this respect is their respective uses of 'meaning'. The ideal language philosopher cuts his finer. Why this is so is, of course, immensely important. As we shall see Witt-
genstein's preference for the broad and all engulfing use of 'meaning' is symptomatic of his concern with linguistic behavior and his at times subtle attempt to solve certain problems which bothered him all his life, e.g., the problem of the synthetic a priori.

Of course, someone might still object, claiming that such sentences as 'God is omnipotent' are descriptive, even though religious. Thus, the objector continues that it ought to appear in L, not merely in the context of its use, but alone, as 'London is east of New York'. That is, both sentences have meaning because they refer to facts and not because they are used. Again, the method is neutral. Whether this particular sentence actually appears in L depends on what sort of interpretation rules a philosopher selects; or, more aptly, on how a philosopher refines the rough commonsensical use of 'acquainted'. Nor is this to jump the gun. In his last step our philosopher must show that his L can dissolve all the philosophical problems.

One source of the objection that L cannot be adequate because it only contains descriptive sentences is the failure to distinguish among the several meanings of 'meaning'. Religious language is meaningful. People use it and behave in various ways to it. So, too, with poetic language and all other non-descriptive talk. Like Wittgenstein's, the ideal
language method does not limit the actual uses of language. It merely describes the world, which, of course, includes linguistic as well as non-linguistic objects.

2. The history of philosophy since Frege can be seen rather profitably as a debate concerning the meaning of 'meaning'. Phrases such as "meaning criterion," "the meaning is the referent," and "the meaning is the use" have created numerous confusions in recent years. Naturally I do not intend to dispell those confusions here. I merely wish to point out that even though it may appear that way, the meaning of 'meaning' is not really at issue between the later Wittgenstein and the ideal language philosopher. The cause of the appearance is this. The later Wittgenstein claims that meaning is use. The ideal language philosopher seems to claim that meaning is reference. However, the appearance is quickly dispelled. Wittgenstein is quick to qualify the word 'use'; the ideal language philosopher is quick to point out that there are many meanings of 'meaning'. For example, Wittgenstein claims that only some meaningful words have referring uses. The ideal language philosopher marks that same group by speaking of words which refer. The question, at least from where I stand, is: Why does Wittgenstein formulate meaning in terms of use? To be sure, the answer is complicated. In many ways this study is an answer to it.
For the moment, though, suffice it to say that Wittgenstein's formulation stems from his inability to handle the problems of mind, and from his related inability to distinguish philosophy from psychology.

3. The ideal language philosopher claims to recover the commonsense core of each (traditional) position. The later Wittgenstein claims to uncover the grammatical truth in each. For example, the commonsense core of nominalism is the fact that one never senses a character alone but always something which exemplifies it. The later Wittgenstein, in contrast, might argue that the fact in question is really a linguistic one, e.g., he might suggest that the nominalist is merely struck by the fact that our descriptive language is subject-predicate in form. That means that in reporting or describing what one sees one always uses sentences which contain a subject and predicate conjoined (in most cases) by the predicative is. Thus, a basic fact is for him merely a grammatical truth. Whether or not Wittgenstein would employ precisely those words is immaterial. What is significant is his style of analysis.

One important respect, therefore, in which the methods clash is this: the ideal language philosopher speaks about facts of the world; Wittgenstein, about facts of language. Furthermore, Wittgenstein wishes to maintain that these lin-
guistic facts, or, as he calls them, grammatical truths, are somehow privileged. That is, he calls them rules and thereby subtly implies that what they reflect is merely an agreement on the part of the users of language. The ideal language philosopher, of course, rejects this. Those rules, if they be such, are forced upon us by what the nonlinguistic facts are. To even suggest that they are in some radical sense arbitrary makes therefore no sense to him. Moreover, the ideal language philosopher would argue that the grammatical truths about which Wittgenstein speaks are merely covert ways of stating commonsense cores of traditional philosophical propositions. He would argue that many of Wittgenstein's grammatical truths are indeed nonlinguistic truths as well as nonanalytic ones. Or, to put the matter cryptically, Wittgenstein's category of grammatical truth is too large.

An ideal language philosopher who makes this charge must, therefore, do two things. First, he must show that Wittgenstein's notion of a grammatical truth is inadequate. Second, he must show why Wittgenstein wishes to give privileged status to those truths which he wrongly includes in the category. That is, he will claim that, without noticing it, Wittgenstein actually uses 'rule', 'agreement', and 'grammar' philosophically. Thus he will explicate these uses and, in explicating them, unveil the commonsense core of Wittgen-
stein's position. Indeed, from the ideal language philosopher's viewpoint, that is a description of what I have undertaken to do in this study. Let us, therefore, turn to a critical examination of the notion of a grammatical truth.

In a later chapter I shall analyse in detail the historical and structural roots of the notion. At this juncture I merely wish to summarize the results in order to provide a perspective for the ensuing criticism. In the Tractatus Wittgenstein held that such sentences as 'Nothing is both red and green' (traditionally called synthetic a priori) are analytic. By this he meant many things, only two of which need here be mentioned. (1) Analytic truths are linguistic truths, distinguishable by their linguistic form (syntax). (2) Analytic truths are uninformative and say nothing about the world. In the Tractatus the truth tables were proposed as the singling-out mechanism for those truths. That is, if a sentence were true in virtue of its truth table, then it would be analytic; in particular, tautologous. However, with that mechanism 'Nothing is both red and blue' did not prove to be analytic. In the Tractatus, though, Wittgenstein seemed to think that the problem was solvable. In the 1929 paper he admitted that it was not. His dissatisfaction with the Tractatus on that point is clear and forceful. He suggested changes but solved nothing. In the Blue
Book a solution emerges. Its price was high, at least from where I stand, for it cost him the *Tractatus*. The solution, of course, was the notion of a grammatical truth which is so designed that 'Nothing is both red and green' is one. Not surprisingly, a grammatical truth is a linguistic truth, distinguishable by its linguistic form (now, *use*). It is also a rule of language and reflects an agreement on the part of the users of language. Thus, it says nothing about the world.

What precisely is wrong with the notion of a grammatical truth? To this question I now turn. Before doing so, though, I wish again to emphasize the strategy behind the notion. Wittgenstein throughout both phases of his philosophical life was committed to distinguishing between two radically different kinds of sentences. In the tradition this distinction has had various labels, e.g., "*a priori-a posteriori*," "factual-formal;", "logical-"empirical," and "analytic-synthetic." I shall use the last phrase to refer to the distinction, realizing, of course, that it, as well as the others, is used philosophically. However, the distinction is itself not philosophical. It is rooted in commonsense. On this point there is no disagreement between the ideal language philosopher and Wittgenstein. The disagreement lies in the way the distinction is established, or,
more aptly, in the way the traditional method of drawing the
distinction is explicated. Wittgenstein's explication is
unsatisfactory.

Without as yet analyzing Wittgenstein's method of deter-
mining the boundary line between analytic and synthetic
truths I wish to make a general criticism of what he believes
the distinction signifies. According to Wittgenstein, gram­
matical truths say nothing, are not informative, are linguis­
tic truths, are rules of language, and are arbitrary. These
words are all used philosophically. That is why they are
italicized. Rather than explicate them, however, I shall
make a few select comments which will map, in contrast to
photograph, their explication and will reveal the ground of
contention.

Consider the sentence, 'The moon is made of green cheese
or the moon is not made of green cheese'. The sentence is
analytic upon the explications proposed by both methods.
Since it is analytic, its truth is revealed by its linguistic
form (in the one case its syntax; in the other, its use).
That means, one need not look to the moon to know whether the
sentence is true. In this sense it is not informative and
says nothing, for though one knows it to be true one may
still not know whether the moon is or is not made of green
cheese. However, that a sentence of this form is analytic
does say something. First, since the sentence is analyti-
cally true it is true. That is, in any commonsensical use
of 'fact', it is a fact that the moon is not both made of
green cheese and not made of green cheese. About that there
is nothing arbitrary. No one agrees or legislates that it is
not both. Second, that sentences such as the one mentioned
are analytic (as explicated syntactically) is informative.
It reveals something about the nature of the world. That is,
it is not just a matter of language that some sentences are
analytic. For, no matter how one establishes the language,
the fact that it works, i.e., that there is some correspon-
dence between true sentences and what is the case, is not in
any way arbitrary, or established. It happens, if I may so
express myself. What is arbitrary is the grammatical form
of the language and, thus, the grammatical features which
allow one to single out the analytic sentences. But again,
that the language can be successfully used in describing
the world is not arbitrary. Therefore, only in a limited
and, at that, misleading sense, are analytic truths linguis-
tic truths. For, though the truth of analytic sentences is
determined by the form of the language, that form insofar
as it represents the world is not arbitrary in any sense.
Whether a language represents the world is a fact just as
the moon not being made of green cheese is a fact. To be
sure, it is a highly more significant fact, or, as some say, a fact on a lower level of factuality. But it is a fact. In this sense analytic sentences are informative. Or, more correctly, that a language can bear the burden of the distinction and still successfully describe the world, is informative, says something, and is not a matter of language.

Wittgenstein, then, in estimating the significance of the distinction is wrong. He is inclined to give analytic sentences a privileged status in the most absurd sense, i.e., he is knocking at, if he has not already passed through, the door of conventionalism. Again, there are certain aspects of language which are conventional, e.g., what symbols are used to refer to what colors. But, it is not a convention that a language can represent the world in the sense that true sentences can be paired off with what is the case. Thus, even though one singles out analytic sentences by the grammatical features (which are arbitrary) of the language there is nothing conventional about the fact that this can be done.

This streak of conventionalism which is quite prominent in the later Wittgenstein already appears in the earlier. Its cause is his failure to give logic its ontological due. In a later chapter I shall consider his failure in detail. For the moment I merely wish to note the failure and to make
clear that this criticism stands on its own feet. That is, even if one were to accept Wittgenstein's method of drawing the distinction one would still have to answer this criticism independently. For, it strikes not at the method but the significance of the distinction.

How does Wittgenstein distinguish the two kinds of sentences? Consider the sentence, 'Nothing is both red and green (at the same time all over)'. Wittgenstein claims it to be a grammatical truth. By this he means that it is a rule for the use of the words 'green' and 'red'. That is, the rule informs us that the schema 'x is both red and green' is a nonsensical one. But why is it nonsense? Why do sentences of that form have no use?

There are, in the Wittgensteinian genre, two possible answers to these questions. (1) He can claim that in the context of ordinary language a person when confronted by another claiming to have seen an object which is both red and green all over at the same time responds, "Nonsense!"; and, means by that that the sentence is unacceptable in ordinary language. (2) He can claim that a schema such as 'x is both red and green (all over at the same time)' never is employed. That is, there is no actual use of a sentence which is merely the completion of the schema.

In Wittgenstein's later works he seems to opt for (2),
not (1). However, rather than debate this textual point I shall undertake to criticize both (1) and (2). It should be noted, though, that Wittgenstein's own discussion of the notion of a grammatical truth is surprisingly thin and sketchy, especially in the light of the fundamental role it plays in his "system."

Let us consider (2) first. To say that a sentence is a grammatical truth is to say that its negation has no actual use. What does the phrase 'actual use' mean? Two answers seem plausible. (a) A sentence has no actual use means that there is no state of affairs to which it corresponds. (b) A sentence has no actual use means that there is no state of affairs to which it could correspond. Neither seems satisfactory. For, (a) in effect limits the class of meaningful sentences to true ones. That is, if there is no state of affairs corresponding to the sentence, it is false (at least in descriptive discourse). But clearly there are many false sentences which are meaningful in any ordinary sense of that word; e.g., 'the sun is closer to the earth than the moon'. Of course, Wittgenstein might argue that actual use means having once been true, but not necessarily at the time of its assertion. But, again, this does not help. The sentence offered above has never, I dare say, been true, at least not to our knowledge. (b) fails for the simple reason that it
reintroduces the problem. That is, the word 'could' is itself a modal word. Thus, the problem is no longer solvable in terms of what is or is not used.

The preceding paragraph reveals, of course, the peculiarity of Wittgenstein's use of 'use'. For, if 'use' is not qualified by 'could', then all sentences which have not at one time or another been true are meaningless. Clearly this is absurd. On the other hand, if 'use' is qualified by 'could' then how does one determine whether a sentence could have a use? One thing is clear: such a determination cannot be in terms of use. Wittgenstein himself provides us with no clue to the question's answer. Nor do I have one to offer.

(1) is the more plausible and, I believe, more defensible answer. Certainly it is in the style of the game. In fact, it is surprising that Wittgenstein did not give it more attention. (1) states that a sentence is nonsense if people say it is and by saying so cite another sentence which is the negation of the sentence deemed nonsense and in the context cite it as a rule. For example, if a child were to tell his father that he had just seen a ball that was both red and blue all over at the same time the father might assert, "Nonsense. Nothing is both red and blue all over at the same time." A defender of (1) must argue, therefore, that this
use of 'nonsense' is the one Wittgenstein wishes it to be, i.e., the use of 'nonsense' which means logically, not physically, impossible, or, more conceedly, the use of 'nonsense' that means that one does not know how to use the words (in this case) 'red' and 'green'. In this latter sense, then, the father would implicitly be instructing the child in how to use the words 'green' and 'red'.

Now for three objections.

1. The word 'nonsense' is used in many ways in ordinary language. For example, we frequently dismiss implausible tales with 'Nonsense!' This merely shows that there are many contexts in which what is termed nonsense is well understood, but fails of plausibility. Of course, if it could be shown that people do in fact claim in ordinary contexts that such sentences as are grammatical truths according to Wittgenstein are rules for the uses of words, then a defender of (1) might have a case. However, ordinary language is just not that precise, and fails to yield an effective criterion for distinguishing the two kinds of sentences. That is not to say though, that the distinction is not commonsensical. That is, just because ordinarily language does not admit of an effective criterion does not imply that the distinction is not commonsensical.

It will be prudent to answer one general objection to
the preceding discussion. The objection is as follows:

Well, the distinction between philosophical and commonsensical uses admits of no criterion. Why, then, should the distinction between analytic and synthetic sentences admit of one? The answer is two-fold. First, the demand for a criterion for the former distinction is, as I noted above, taken care of at other places in the respective systems; in the one case by producing grammatical analogies, in the other by exhibiting the spuriousness of the traditional dialectics. The criterion for distinguishing the two kinds of sentences is not taken care of elsewhere. Second, philosophy is still the art of distinction. At some point one must produce more than Ryle's nose for making one.

2. Assume in our fictitious situation that the father thinks of himself as instructing the child. Even if that is so, one need not conclude that the father is giving the child rules for the use of the words. For, in teaching a language one ultimately relies upon what he knows to be true and, thus, if the learner in employing the newly learned language does not agree to the truths something is wrong. We naturally assume that one does not know how to use the words. But, again, that does not mean that he cannot be understood. For example, consider a child who in all seriousness asserts that he has just flown to the moon under his own power.
Here, too, I think one would assume that the child did not understand what he asserted. But that does not mean it was meaningless. The point is that in teaching a language we rely as heavily on what we are sure is true as we do on the "rules" of the language. And I believe, contrary to Wittgenstein, that those rules are far fewer than he is inclined to think.

3. One of Wittgenstein's pet analogies is that a word is like a piece in chess. That is, the rules for the use of a word are like the rules for the use of a piece in chess. The analogy is misleading.

There are, at least, two distinct ways in which one might be said to use a piece in chess. (1) There is the purely formal use. This would include such things as keeping the bishop on its own diagonal, the rook on the verticals and horizontals, etc. These uses are governed by rules which are stipulative and agreed upon. (2) There are the uses of the pieces which are effective and skillful. For example, such uses would include knowing how to benefit from the knight's ability to fork, from the bishop's ability to pin, etc. In fact, in some chess books such uses are discussed in preliminary chapters in order to show the person how to play the game, how to achieve mate. But these rules are not like those of type (1). They are not stipulative.
They are discoveries, if I may so speak, of what combinations present themselves in chess, of what uses are powerful, etc. They are in fact more like laws of a scientific nature, showing one the best methods for capturing, checking, etc.

Now consider the rules for the use of a word. Are they supposed to be like the rules of chess in sense (1) or (2)? If in sense (1), then the linguistic rules most similar are those which specify which marks or sounds are to refer to what things, how adjectives and nouns are to be combined, etc. These linguistic rules seem to have the same character as chess rules of type (1). The sentence 'Nothing is both red and green (...)', in contrast would have the character of the chess rules of type (2). That is, it tells people how not to use words in the sense that certain things do not occur. It would be similar to telling a chess novice that he should not move a piece to a square that is under attack if that square is not defended; unless he intends a sacrifice. Or, to say the same thing differently, the sentence 'Nothing is both red and green (...)' is a consequence of the rules of type (1); though not, of course, merely a linguistic consequence. For, if 'red' refers to red and 'green' to green, then there is no true sentence of the form 'x is both red and green (...) for the simple reason that nothing is both red and green. But, again, this does not mean that 'x is both red and green' is a nonsensical schema, just as the wanton aban-
donment of one's queen is not outlawed in chess. In this sense the rule is a highly confirmed generalization. Moreover, it says nothing about logical impossibility.

What emerges from all this is the fact that Wittgenstein's use of 'use' and 'rule' is extremely broad and works more to obliterate distinctions than to sharpen them.

One might object to what I have just said about the arbitrary or stipulative character of rules of type (1). The objector might claim that the rules are not stipulative in the sense that reasons can be given for retaining or discarding them. Consider, for example, the reasons some might offer for not permitting the queen the power of the knight. It opens up too many possibilities, thus making the game unmanageable. The objection is well taken. However, I believe it works more to Wittgenstein's disadvantage than advantage. First, the objection strikes more at the significance of the distinction between the two types of sentences than at the method for drawing it. That is, the point is whether analytic truths are arbitrary. As I have previously argued, they are not, for if language is to facilitate communication then it better be such that it accurately represents the world. Consider a slightly different case. It is arbitrary that we use 'green' to refer to green. But in another sense it is not arbitrary that we do not use 'green' to refer to both
red and green. For, that would hamper rather than aid commu-
nication. Therefore, just as the purpose of chess in some
sense governs its rules, so, too, the purpose of language
governs its rules. The result is that one should be cautioned
to refrain from thinking that grammatical truths are arbitrary
though I hasten to add that many grammatical (syntactical)
features of the language which allow one to make the distinc-
tion between the kinds of sentences are arbitrary.
Chapter III

The Later Wittgenstein’s Philosophy of Mind

Is the later Wittgenstein a behaviorist? Everyone who has read the *Investigations* must have asked himself that question. In fact, Wittgenstein, anticipating the question, dialogues it for the reader:

"Are you not really a behaviorist in disguise? Aren’t you at bottom really saying that everything except human behavior is a fiction?" -If I do speak of a fiction, then it is of a grammatical fiction.

Wittgenstein’s answer can be put as follows: Mind is a grammatical fiction. In this chapter I shall do two things. First, I shall explicate the answer. Second, I shall show that it incorporates an ineffability thesis not unlike the one he propounded in the *Tractatus*. That thesis keeps him from behaviorism, but only at the price of inconsistency.

What is a behaviorist? Traditionally, two distinct kinds of entities (ignoring the Self) have been construed as mental: (mental) acts and (mental) contents. The former are referred to by such words as 'remembering', 'seeing', and 'believing'; the latter, by such words as 'after image', 'sensation', 'sense datum', and 'percept'. Some philosophers, e.g., the neutral monists, though, did not wish to label such contents "mental." They preferred to call them "neutral";
hence, the label. One possible contributing reason for their not considering them "mental" is the fact that frequently 'mind' is so used (philosophically) that it refers only to mental acts. Therefore, in the strictest sense of the word, I shall call a behaviorist one who denies ontological status to mental acts. In the broad sense, a behaviorist is one who denies ontological status to both acts and contents. Such philosophers have been traditionally known as materialists.

How does a philosopher deny ontological status to anything? Upon the ideal language philosopher's explication of 'exist', or, if you will, of the ontological enterprise, what exists is what is referred to by an undefined descriptive constant. A behaviorist in the strict sense, therefore, denies that any mental-act word (e.g., 'thinking' or 'seeing') is undefined. Or, to say the same thing differently, a (strict) behaviorist claims that all mental-act words can be defined in L. A behaviorist in the broad sense makes the further claim that words which refer to after images, sense data, and so forth, can be defined. In the latter case it is not so much that 'after image', 'sense datum', etc. are claimed to be definable; rather it is that the words referring to such things and their properties are claimed to be definable.

Wittgenstein, I shall argue, insists that both mental-
act and mental-content words are defined. That makes his materialism transparent. Yet, a note of restraint is discernible in the Investigations. He wishes at the same time to maintain in some sense that mental entities are there, but that they are "ineffable." This introduces the inescapable paradox of the ineffability thesis. If one says that there is something that cannot be spoken about, one involves oneself in a Liar-type contradiction. This goes far beyond the specific issue at hand. As far as the latter is concerned what I just called Wittgenstein's restraint amounts simply to the assertion that there is more to mind than can be said by means of (behavioristically) defined terms. But were he to admit that to speak about this something more we need undefined terms he would admit the existence of mind. This he cannot bring himself to do either. So, he avoids the issue by means of a merely verbal dodge, or, to put the matter bluntly, he uses the "ineffability thesis" to shroud his reluctant behaviorism.

Since I shall argue that Wittgenstein in effect asserts that both mental-act and mental-content words are defined, it will be prudent to explain how this assertion may appear in the guise of a use theory of meaning. From where I stand, the implicit ontology of one who embraces a use theory of meaning is revealed by the kinds of words which he claims to
have referring use. That is, one who holds that meaning is use and also propounds behaviorism will claim that neither mental-act nor mental-content words have referring uses. Or, to put the matter differently, the justifiable uses of mental words will be held to depend on conditions which can be completely described by nonmental words alone. This is merely another way of stating the ideal language philosopher's explication of behaviorism, viz., that there are no undefined mental terms.

Consider the following passages from the *Investigations*:

304. "But you will surely admit that there is a difference between pain-behavior accompanied by pain and pain behavior without any pain" -Admit it? What greater difference could there be? -"And yet you again and again reach the conclusion that the sensation itself is a nothing." -Not at all. It is not a something, but not a nothing either.

305. "But you surely cannot deny that, for example, in remembering an inner process takes place." What gives the impression that we want to deny anything? When one says "Still, an inner process does take place here" - one wants to go on: "After all, you see it." The impression that we wanted to deny something arises from our setting our faces against the picture of the 'inner process'. What we deny is that the picture of the inner process gives us the correct idea of the use of the word "to remember." We say that this picture with its ramifications stands in the way of our seeing the use of the word as it is.

306. Why should I deny that there is a mental process? But "there has just taken place in me the mental process of remembering..." means nothing more than: "I have just remembered...". To deny the mental process would mean to deny the remembering; to deny that anyone ever remembers anything.
Three preliminary remarks will help to facilitate the discussion. (A) It must be remembered that Wittgenstein's over-all aim is to describe the uses of ordinary language, which means describing language as a system of communication. (B) Ontologically, Wittgenstein treats both sensations and mental processes (mental acts) as on a par. For the present purposes the important differences between the two make no difference. That he does treat them as on a par is clear from the content of both 304 and 305. That is, they are both neither somethings, nor nothings. It is worth noticing that this implies that if Wittgenstein is a behaviorist, he is one in the broad sense and, thus, a materialist. (C) When one is taught to use mental words (both act and content), no ostensive teaching takes place in the sense that nothing is pointed at as in the case of teaching the meaning of color words, and so forth. This is a truth as obvious as it is profound. Wittgenstein is frequently guided by it. Again, it is worth noticing that if ostensive teaching is the only way one can learn how to use a word referentially, then one must embrace behaviorism; at least as I have explicated it.

Mental entities are neither somethings, nor nothings. This sentence embodies Wittgenstein's final attempt to locate "mind's place in nature." It is interesting that his excursions into the mystical and paradoxical thus did not cease
with the Tractatus. I say interesting because in the Investigations, as I have already claimed, there is a distinct echo of the early ineffability thesis. In the Tractatus, logical form is ineffable; in the Investigations, mind is. Nor is this sheer coincidence. According to the Tractatus, mind (and language) shares with the world its ineffable structure. That is how it "pictures" or is "about" the world. The earlier ineffability thesis of logical form is, therefore, Wittgenstein's acknowledgement that he cannot account for how mind and (the rest of) the world are related. In later making mind itself "ineffable" he acknowledges his inability to locate mind in the world. But of this later. For the moment let us explore the later view.

1. Mental entities are not somethings. Wittgenstein grounds this claim on three main considerations. (a) There is no ostensive teaching of mental words. That is, in instructing one in the use of mental words one does not point at objects which can be said to be named or referred to by such terms, as in the case of teaching color words. (b) In verifying such sentences as 'I remember meeting him' or 'I am in pain' when spoken by another one does not in any way attempt to gain access to the speaker's mental processes or sensations. That would make no sense. We do not have such access. Such things, as one says, are private. Thus, in
verifying such sentences we are forced to rely exclusively on the behavior (past, present, and future) of the speaker and others. For example, if a person claims to remember something which we have reason to believe is not something which the person could have remembered because he did in fact not have the experience, we can only question his remembering it in terms of the testimony of others, his own testimony, and so forth. But at no time does it help to question him about his mental processes. (c) Consider, as Wittgenstein suggests, how one reacts to another's statement that he has a pain. Does one imagine or even try to imagine how the other person feels? Seldom, if ever. One acts, tries to give comfort, and so on. Or, to put the matter as Wittgenstein might, the use of such a sentence is designed to get another to do something. That is, such sentences are construed by Wittgenstein as tools, the purpose of which is to manipulate another's behavior. In fact, Wittgenstein argues that such sentences as 'I am in pain' are substitutes for pain behavior, their use being no different in principle than the use of crying. Such a view of language tends to minimize, if not to eliminate, the purely reportorial aspect of language. These three considerations, (a), (b), and (c), lead then to the view that mental entities are not some-
2. Mental entities are not nothings. Three main considerations underpin this claim too. (a) There is a world of difference between knowing that another is in pain and knowing that oneself is in pain, or, as Wittgenstein prefers to say for reasons to be examined shortly, between having a pain and knowing that another has a pain. To stress but one important difference, in the former case physical behavior is ignored whereas in the latter case, far from being ignored, it is all that counts. (b) In 305 Wittgenstein emphatically acknowledges that mental processes do make a difference; e.g., there is no remembering without the process. This, I should say, is a phenomenological truth which no one can fail to accept. Wittgenstein does accept it, but tries to argue that the mental processes do not help us understand the use of 'remember'. Above I noted that this is true for the teaching and verification aspects of the language game. Now let me note in passing in what way it is false. A speaker in asserting such sentences as 'I remember him' is obviously referring to his mental process. That is, what occasions the sentence is the mental process and not just considerations about what effect the sentence will have on another, though sometimes such considerations enter (as, incidentally, is the case with any other utterance). (c) Wittgenstein himself in trying to describe the role that
mental entities play in the language game is forced again and again to acknowledge their phenomenological presence. And thus acknowledge them he does, if only to threaten their banishment.

(1.) and (2.) are the commonsense cores of behaviorism and solipsism, respectively. Since they are, they must be preserved. The ideal language philosopher preserves them by reflecting them in L. Wittgenstein attempts to preserve them paradoxically in the claim that mental entities are not somethings but not nothings either. To be sure, both philosophers are sensitive to the absurdities that have grown out of each core. For example, (1.) in its philosophical dress is: Minds do not exist; (2.) other minds do not exist. Both claims are nonsense for the simple reason that they contain 'exist' used philosophically. If 'exist' were used commonsensically in both, then both would be false and both could be transcribed in L. This much is common to both styles of linguistic philosophy, though each would express it differently. Why, then, is Wittgenstein unable to reconcile these two commonsense cores?

His attempt to locate mind forces him to create in effect two languages. On the one hand, there is the language of communication; the language of use, if I may so speak. This is the language he describes. On the other hand, there
is the language which Wittgenstein employs in describing the language of *use*. For convenience I shall refer to the former as the object language; to the latter as the metalanguage. The object language is behavioristic; the metalanguage is not. With respect to the former Wittgenstein makes the claim that mental entities are not *somethings*. With respect to the latter he makes the claim that mental entities are not *nothings*. Or, to say the same thing differently, when he is speaking about the uses of language, mental entities are acknowledged, but they are denied a role in the language about the use of which he speaks. Shortly I shall show how Wittgenstein attempts to re-enforce this view. For the moment I merely wish to make explicit the dilemma which it begets.

The dilemma is this. *If* in describing the *uses* of language Wittgenstein speaks, as he professes, nonphilosophical­ly, *then* his distinction, though not incorrect, is misleading. For, commonsensically mental entities do play a role, no matter how small or restricted. More precisely, if Wittgenstein's description of language is one of its uses, then mental entities are, since they are mentioned in his description, *somethings* in the language of use. *If*, however, such a description is not one of the nonphilosophical uses of language, then Wittgenstein by his own standard merely utters nonsense.
For, sense is circumscribed in terms of the uses of language.

The ideal language philosopher escapes this dilemma. To speak unguardedly for the moment, the ideal language philosopher in constructing his artificial language is guided by the notion that it is to function as a picture, not of uses, but of what entities are phenomenologically undeniable and of what entities commonsense accepts. This covers mental as well as nonmental entities. Both kinds must be pictured. L must contain signs which stand for them. In speaking about L, the ideal language philosopher uses language commonsensically, which permits the scope of Wittgenstein's metalanguage, and not merely that of his object language, which latter is rather arbitrarily limited by what is mentioned in intersubjective teaching and verification. Or, to put it differently, the ideal language philosopher, in constructing L, makes a schema of what he can speak about commonsensically, i.e., he makes a linguistic picture of the world of Wittgenstein's metalanguage, and not merely of the selective world of his object language. For, the ideal language philosopher is committed to transcribing in principle everything that can be said commonsensically.

It may be worthwhile at this point to consider a possible objection to everything that has been said in this chapter thus far. The objection runs as follows. "Why all the fuss? Wittgenstein and the ideal language philosopher are
two entirely different things. He is describing the uses of language. The ideal language philosopher is picturing the world. Even if the latter's task can be accomplished, it in no way conflicts with the former's. He only wishes to describe those uses of language which are relevant to public teaching and public verification of language. The ideal language philosopher, by his own admission, grants that mental entities play no role in those activities. Thus where difference is implied, there is actually agreement." My answer is three-fold. First, Wittgenstein claims that the description of language which he offers will lead to the dissolution of the philosophical problems. Yet, from where I stand, his description is of no help; if only because the traditional philosophers were not attempting a description of the selective world of his object language, but of that of his metalanguage. This alone makes the ideal language philosopher better equipped to cope with the problems. For, he is trying to explicate the philosophical uses which found their way into the traditional descriptions. Second, though it is true that one does not appeal to another person's sensations when attempting to verify, if need be, that that person is in pain, this does not mean that what is verified is that the other person's behavior is consistent, i.e., like everyone else's. Rather, what is verified is that the other
person has a pain. Moreover, it is easy to overlook, for example, the difference between verifying what the person remembered and that he remembers it. If one merely attends to the former question then mental entities play no role whatsoever. But if one also attends to the latter; they do. Third, if now the objector continues by arguing that whether the one or the other method solves the problems is only a matter of taste, I answer that at this point argument ceases. All that is left to do is to point out the places at which Wittgenstein falls into the traditional philosophical traps and to uncover the causes of the fall. I turn again to that task.

As I have already shown, Wittgenstein is confronted by a dilemma. He must either admit that his position is contradictory or embrace an ineffability thesis with respect to mind, in which case his position becomes chaotic by making his own (meta-)discussion of mind nonsense. Moreover, the implicit result of the latter alternative is materialism. That is, at least implicitly a materialist is revealed by his arguments centering on the private language issue. For my purposes I shall divide them into two groups, each of which will illuminate a different aspect of his materialism. The first deals with the undermining of the ontological status of mental acts. The second deals with the more general
claim that mental entities can in no way be referred to.

Consider the following passage:

246. It can't be said of me at all (except perhaps as a joke) that I know I am in pain. What is it supposed to mean - except perhaps that I am in pain?

In this passage Wittgenstein suggests that 'I know I am in pain' and 'I am in pain' mean the same thing, or, that the former says no more than the latter. One reason for his claiming this is that from intellectual motives to be discussed much later he wishes the sentence 'not (I know I am in pain) and (I am in pain)' to be contradictory, or as he would have it, nonsense. One way of achieving this is to claim that the first member of the conjunction, unnegated, is synonomous with the second. The price he pays for this is the implicit denial that mental acts exist. For expository purposes let 'p' stand for any content; 'p'(a), for any awareness (knowledge) of that content. Wittgenstein, therefore, may be taken to urge upon us that

\[
P \quad p \supset (\text{Ex})'p'(x)
\]

is analytic. If 'this is a pain' is substituted for 'p' then the sentence is an obvious truth. However, in most instances it does not carry the same certainty and, in fact, is often false. To maintain that it is in some sense necessary is to advocate an idealism not unlike Berkeley's. For, to claim that P is necessary is but another way of claiming that esse
est percipi; i.e., that there is nothing which is not the content of an awareness. As all idealism does, this leads, as I shall show below, to a denial of the act, for, loosely speaking, there is no longer any distinction between it and its content, a distinction which must be preserved if the commonsense core of realism is to be preserved. That core is preserved by the fact that P is not a tautology, at least not upon the ideal language philosopher's explication of the analytic-synthetic distinction.

There are three reasons why Wittgenstein is misled by the sentence he chooses. First, 'I am in pain' and 'I have a pain' already contain an awareness, or, better, a reference to an awareness. That is what the sentences say; viz., that one is aware of pain. Thus, since an awareness is a form of knowing there is a certain plausibility in maintaining that knowing one is in pain and having a pain are one and the same thing. Second, the sentences 'I have a pain' and 'I am in pain' exhibit the pattern of sentences like 'That painting has a peculiar perspective' or 'he has a pain'; that is, the pattern of exemplification, which is used when predicating a property of a thing, putting the property and the thing in the exemplification relation. This is the classical pattern of idealism. The idealist implicitly claims that the "relation" between mind and its content is exemplification of the latter by the former. Or, more succinctly, the idealist
claims that the content is an attribute of the mind. Oddly enough, classical materialism employs the same pattern, merely substituting 'body' for 'mind'. Therefore, the very form of the sentence which Wittgenstein chooses may lead to either the idealist or the materialist pattern. Third, consider the sentence 'This is a pain', once as a picture, once in use. In the latter case mind is already present in the sense that 'this' when employed by a speaker signifies attention, or pointing, or awareness. In fact, Russell in *Logical Atomism* called *this* an emphatic particular and argued, at that time at least, that to give up *this* as an emphatic particular would entail giving up mind. In other words, 'this' in 'this is a pain' considered in use is covert acknowledgement of the act. If one concentrates on use and at the same time does not recognize the covert acknowledgement of the act one may be re-enforced in his belief that what the sentence describes can be adequately analyzed without reference to the act (awareness).

With respect to the private language issue I refer the reader to Sections 244-281 of the *Investigations*. In those sections Wittgenstein attempts to do two things: (1) to explain how sensation words, e.g., 'pain', are taught, (2) to show that sensation can in no way be referred to, i.e., cannot be named. With respect to (1) he claims that even from
the speaker's point of view 'I am in pain' does not refer to a sensation but is a substitute for overt pain behavior. For example, the sentence might become a substitute for crying. This, of course, may sometimes be the case in the sense that the sentence may elicit from a listener the same response as crying. But it is not always the case. To grasp that, one merely needs to remember the last time he tried to describe a particular pain. What is more important, however, is the fact that Wittgenstein's suggestion, first, forces sensations into the background, and, second, undermines the act by construing the sentence as a bodily response.

With respect to whether or not sensations can be referred to it should be noted that Wittgenstein's claim is much stronger than the one usually made in this context. Ryle, for example, makes the rather trivial observation that one cannot communicate about sensations unless one employs the language which one shares with his audience and which, therefore, does not refer to the sensation for the reason that it has been acquired by both speaker and audience through ostensive teaching. Wittgenstein goes further. He claims that one cannot even refer to one's own sensations. That is, one cannot identify or recognize recurrent sensations. For, there is no criterion of correctness. The criterion which he somewhat subtly invokes here is the same one which the
classical positivists invoked, viz., the criterion of public verifiability. Wittgenstein, then, claims that it is meaningless to speak (to oneself) about one's own sensations because there is no way of verifying whether or not one sensation is the same or different from any other. Moreover, the only kind of verification which is meaningful, according to him, is public verification. This claim completely undercuts the referential feature of mental words. It is the prelude to an unabashed behaviorism.

Whether or not the claim is true is a question which I shall brush aside except for remarking that sensation words, even those publicly learned, do refer to sensations. For, even if they are used as substitutes for sensation-elicited, overt behavior, they, like the behavior itself, are occasioned by the sensation. Thus, there is a rather obvious connection established between the sensation and the word, a connection which is the very ground of reference.

In summary, Wittgenstein's claim that mind is a grammatical fiction rests squarely on, first, the arbitrary difference between his object and his metalanguage and, second, the claim that mental terms do not and cannot in any way refer to mental entities. This is the heart of his behaviorism. He tempers it by resorting to an ineffability doctrine, though. But the appeal merely makes his predicament more obvious.
Chapter IV

THE PICTURE THEORY—I

The underlying thesis of the Tractatus is that philosophical assertions are nonsense. According to Wittgenstein, its demonstration consists in exhibiting an interpreted schema which, on the one hand, allows the transcription of everything commonsensical, and, on the other, bars the transcription of everything philosophical. Furthermore, the schema exhibited in the Tractatus is alleged, more or less independently of the claim that it is adequate for the demonstration, to be a picture, or, more precisely, every sentence of it is claimed to be a picture. Observe that it is the schema, not ordinary language, which is the picture. Wittgenstein maintains that a (commonsensical) sentence of natural language is a picture only in the trivial sense that every such sentence is transcribable in the ideal language. Some commentators have viewed the matter otherwise, thus basing their exposition of the picture theory on natural language and, even more mistakenly, building their refutation on it. To convince yourself that they are mistaken consider first that, according to Wittgenstein, language and what it pictures share logical form (2.2), and,
second, that the apparent logical form of the proposition need not be its real form (4.0031). The exposition I shall offer here is based on an artificial language. That does not mean, however, that all features of ordinary language are to be ignored. Of course not. The point is that unless one views the theory in terms of a syntactically precise language one cannot appreciate its subtleties. This does not imply that the ideal language method is correct, or anything of the sort. It merely implies that no matter how one does philosophy, one ought to think of the picture theory as applying to an improved language and not to any natural language. The features of ordinary language which cannot be ignored are those which help to elucidate the structural origins of the theory. But, then the origins of the theory and the theory itself are two things, not one.

Details apart; the schema proposed in the Tractatus contains only two kinds of sentences, atomic and molecular, the latter being truth functions of the former (cf. 5). The distinction induces Wittgenstein to refine the theory. The refinement is this: The different kinds of sentences picture differently. (A) Atomic sentences picture directly (2.201, 4.0311). (B) Molecular sentences picture indirectly, through their atomic constituents (4.1, 4.4, 5.3). The purpose of this chapter is to explicate (A) and to explore
several of its structural connections with other key ideas. In the following chapter I shall attend to (B). Before undertaking that task one general comment regarding the point of the theory is in order.

Frege reified the True and the False. Wittgenstein rebelled, setting himself the task of demonstrating their ontological redundance. The picture theory provides such a demonstration, or so he believed. Briefly, a sentence is a picture in the sense that it shows what is the case (not the case) if it is true (false). Hence truth and falsity are, if I may so express myself, built into the very notion of a sentence (4.061 - 4.063). To say that a sentence is true (false) is to say that a certain state of affairs ("combination of objects") obtains (does not obtain). It is not to say, as Wittgenstein interprets Frege's suggestion, that a sense (i.e., what is expressed by a sentence) exemplifies a property, the True or the False (i.e., what is referred to by a sentence, depending on what is the case).¹

One role of the picture theory is, therefore, to illuminate the nature of verification, thereby showing that 'true' and 'false', though they may purport to name, do not name anything. They are merely ways of saying that certain states of affairs, viz., those pictured by the sentence termed true or false, do or do not obtain, respectively. To put the
matter as I did before, truth and falsity are built into the sentence. For, to understand an indicative sentence is to know what states of affairs will verify or falsify it. However, Wittgenstein does not thereby espouse the later Positivists's theory of meaning, viz., that "the meaning of a sentence is the method of its verification." He is merely asserting the truism that knowing the meaning of a sentence includes, if it is not the same as, knowing what state of affairs will verify or falsify it. That, I repeat, is quite different from saying that knowing the meaning of a sentence is the same as knowing the method, in some operational sense, of verifying or falsifying it. Few will deny that the manner in which Wittgenstein expounds the picture theory might tempt one to identify meaning with verification. Yet, Wittgenstein does not identify them.

The motives which lead Frege to reify the True and the False are at present immaterial. Whether or not Wittgenstein's gambit succeeds is also immaterial. What is material is that the author of the Tractatus casts the picture theory in the executioner's role. To be executed are Frege's twin monsters. That is one major point of the theory.

Four uses of 'picture' are relevant to the explication of (A). They occur in the following sentences. (1) A sentence is a picture (4.01, 4.021, 6.124) (2) An analytic
sentence is not a picture (4.462). (3) An atomic sentence is a picture (2.201, 4.0311). (4) A true sentence is a picture (2.19). The immediate task is to explicate these four philosophical assertions. First, I shall examine some of the grammar of the ordinary use of 'picture'. Then, I shall explicate the four sentences by examining each of them in the context of Wittgenstein's schema.

While being shown a photograph of Bertrand Russell, whom I have never seen, I am instructed to meet him on his arrival on the afternoon train. The person giving the instructions assumes that I will be able to recognize Russell as a result of having seen his picture. That "assumption" uncovers what is undoubtedly the most pervasive aspect of the grammar of 'picture', viz., that the picture enables one to recognize the pictured. With respect to that aspect, language (descriptive, at least) eminently qualifies as a picture. The person who instructed could just as well have described Russell, assuming only that I knew the language, i.e., knew what the words meant. Thus, had the instructor told me that Russell was tall, slim, white-haired, old, and so forth, I would have been able to recognize him.

There are differences, however. In the case of the photograph there is something which both it and Russell share. That something is more than the shared color of the
elements of the picture and corresponding elements of the pictured in the case of a color photo. Even in the case of a black-and-white photo, there is something which both it and what it pictures share, or have in common. What they have in common are geometrical relations. That is, the elements of the picture stand in geometrical relations which are literally the same as the geometrical relations among the elements of the pictured. Facing the picture as one would face the pictured, the eyes, say, of the picture stand in the same geometrical relations as the eyes of the pictured. In fact, almost all things which we ordinarily call pictures picture via shared geometrical features. Maps, architectural drawings, painting, and so forth, all picture by means of arranging their elements in geometrical relations which are literally the same as the relations which obtain between the corresponding elements.

Language and what it pictures does not possess that "sharing feature," at least not in the case of natural language, and, as we shall see, not even in the case of artificial ones. Assuming the language to be written, the relation in which the words (elements of language) stand are geometrical ones. However, what the words represent cannot be said, in most cases at least, to stand in the same relations. For example, the things corresponding to the
three words of which 'Russell is tall' is composed do not stand in the same relations as do the three words. Nor, does the omission of 'is' help matters. For, it would be sheer folly to argue that Russell and tall stand in any geometrical relation, leave alone the one in which 'Russell' and 'tall' stand. In principle, the issue is no different in the case of artificial languages. But of that later.

Wittgenstein, seizing upon the fact that an indicative sentence is a picture in that it enables one to recognize the state of affairs expressed without previous acquaintance with it, is led to conclude that the sentence and what it pictures must share something, i.e., have something in common. What they thus share is, purportedly, logical form. In this he is mistaken; his mistake stemming from his failure to appreciate the grammar of 'picture'. But of this later. The point here is that if one maintains that the picture and the pictured must share something, then language is not a picture. If, on the other hand, one maintains that a picture need only be the sort of thing which enables one to recognize the pictured from the picture, (descriptive) language surely is one.

There is another important difference between photographs and indicative sentences. A photograph is always of something which exists or did exist. That is, there are
photos of living men and of dead men, but none of men that
never were. A sentence, on the other hand, may be about a
state of affairs that neither obtains now nor ever did.
There is, of course, an analogy between the existence of
the thing photographed and the obtaining of the state of
affairs. Like all analogies it has its limits. The spoken
of state of affairs need not now obtain, nor at any previous
time have obtained. The photographed state of affairs must
either now exist or have existed.

An indicative sentence is more like an architectural
drawing than like a photo. For the drawing, though it is
of something, need not be of something which either now
exists or did exist. The drawing may well be of a building
which at some future time may or may not exist. Yet, whether
or not it is ever built, one knows by looking at the drawing
what the building would look like if it were built. In
this sense the drawing is like an indicative sentence.
Though a sentence may never be true, one who understands it
knows what would be the case if it were true. Accordingly,
both the drawing and the picture may be said to be of a
possibility.

Frequently, an architectural drawing is said to be the
"artist's conception of the building," or, as it is also
said, the drawing represents the building as the artist imagines it. In so speaking one need not lapse into philosophical difficulties. However, if one uses such talk as a guide to what one says about language, the probability of encountering philosophical problems is much greater. One may be tempted to urge that a sentence represents a mental image of the speaker or hearer. Such temptation is to be resisted. The sentence is about the state of affairs. That is what it pictures. Whether or not asserting or understanding it involves mental images is another issue. If one fails to realize that, one may, guided by the idea that a picture is of something, manufacture a mental image to account for false sentences.

Photographs and indicative sentences are alike in the following respect: neither from the picture nor from the sentence can it be determined, in the one case, that the pictured exists or, in the other, that what is expressed is the case. Of course, the context quite often yields clues. For example a picture may contain an inscription giving the dates of the pictured. But, the inscription is not an essential part of the picture. Without it, the picture would still be one. Moreover, even a picture with an inscription may be deceptive.

What, then, of analytic sentences? Are they pictures?
The answer depends on what use of 'picture' one has in mind. Moreover, it depends on whether or not one considers the truth-tables as similar to the inscription on the photo. Wittgenstein himself denies that analytic sentences are pictures. There is nothing wrong with such a denial, provided one makes explicit just what is being denied. Since Wittgenstein was not explicit, problems arose. Of those later.

Thus far I have merely exhibited the grammar of 'picture', or, as some prefer, some associations which 'picture' evokes in various contexts. In particular, five such associations have been exhibited. (i) A picture enables one to recognize the pictured without having been previously acquainted with the pictured. (i i) The picture and the pictured share something; most frequently, the geometrical relations amongst their respective elements. (iii) A picture is of something. (iv) A picture is of something which either exists or did exist. (v) A picture is of something which may exist, but need not now exist or ever have existed. Depending on which feature of picturing one has in mind, the question "Is language a picture?" requires a different answer. In the case of both (ii) and (iv) the answer is patently negative. In the other three cases it is affirmative.

I turn now to a brief description of the essentials of an interpreted schema, preparing for the explication of (1),
(2), (3), and (4).

The construction and interpretation of an improved language consists in (a) specifying the various kinds of signs by shape, (b) stipulating rules, based on only the shapes of the signs, for stringing them together into sentences, and (c) coordinating signs to things. The signs are of two kinds, descriptive and logical. The former are coordinated to things which are said to exist, e.g., physical objects and their properties; the latter to "things" which are said (by some, though surely not by Wittgenstein) to subsist, e.g., exemplification, negation, and conjunction. A sentence of an improved language is, therefore, a well-formed string of signs no one of which is uncoordinated.

The construction and interpretation of an improved language is no more and no less than what has been traditionally called the stipulation of a meaning criterion. For, it consists in stipulating the syntactical (formation) and semantical (coordination) rules for a given class of signs no one of which is uncoordinated.

Every sentence of such a schema is either true or false. For, every sentence expresses a state of affairs (i.e., an arrangement of things) which does or does not obtain. (Every state of affairs can presumably be expressed). Moreover, the state of affairs is known if the meaning (i.e., the coordinated entity) of each sign is known. That
does not mean that one knows whether or not the state of affairs obtains. It merely means that one knows what would obtain (not obtain) if it were true (false). At this point one might express puzzlement, wondering what things are coordinated to the logical signs. Recall that I implicitly drew attention to the puzzle when I surrounded 'thing' with quotes in speaking about subsistent things. Doubtlessly, I have spoken of logical objects (exemplification, negation, etc.) incautiously. In fact, one may believe that I am prepared to reify them. Nothing would be more incorrect. On the other hand, I am not prepared to deny them every kind of ontological status. Here, however, I merely wish to acknowledge the puzzle, promising to solve it later.

Once a specific meaning criterion has been formulated, i.e., (a), (b), and (c) have been specified, other questions can be entertained. One important question is: Can the sentences of the given language be syntactically distinguished (i.e., on the basis of their geometrical properties) into two distinct classes with respect to their truth and falsity? That is, given that every sentence is either true or false, is there any purely syntactical method for determining whether some sentences are true or false? Naturally, the answer depends on the language in question. Most philosophers who have proposed candidates for the ideal language
have intended that their candidate yield an affirmative answer. In fact, one of the purposes of philosophizing by means of an artificial language is to provide a syntactical explication of the distinction involved, i.e., of course, the analytic-synthetic distinction. Wittgenstein's schema permits the explication. (In fact, the syntactical character is largely determined by his attempt to secure the explication). Since his schema contains only atomic and molecular sentences the distinction can be secured by means of the truth tables. A sentence which is either true or false in virtue of its truth table is called analytic (tautological (true) or contradictory (false)). One which is not, is called synthetic. The truth or falsity of synthetic sentences must be established in some other way, traditionally termed "empirical."

Both analytic and synthetic sentences belong to the improved language, i.e., they are both well-formed strings of a fully interpreted language. The truth tables are, in contrast, part of the metalanguage. Accordingly, whether or not a sentence is analytic is a metalinguistic matter. Wittgenstein himself did not fully appreciate that, claiming at one point (4.442-4.431) that a truth-table is a proposition. His failure produced confusions, the last of which we have yet to see.
I. An indicative sentence of ordinary language is either true or false. Yet, one need not know which it is in order to understand it. (1) expresses that truism philosophically, drawing on the use of 'picture' in (1). That is, something is a picture if it enables one to recognize the pictured without previous acquaintance with it. Since a sentence does precisely that in the sense that it may be verified or falsified, it is a picture. Verifying or falsifying a sentence involves recognizing the state of affairs which is expressed by the sentence. However, to suggest further that in understanding a sentence one has a mental picture (i.e., image) of the state of affairs expressed would be foolish. More often than not no mental imagery accompanies the understanding of a sentence.

The peculiar feature of language which (1) strives to capture may also be unearthed as follows. Consider the difference between knowing the meaning of a sentence and knowing the meaning of a word. In the former case what is meant (the state of affairs) may never be the case. Thus, to know the meaning of a sentence one need never be acquainted with what it means. In the latter case that is not so. To know the meaning of a word (an undefined one, at least) one must have been acquainted at least once with its meaning, i.e., the thing meant. The difference is due to the
circumstance that the meaning of a sentence is in some sense "composed of" the meanings of the words occurring in it. That is why the meaning of a sentence can be known without its meaning being presented. Or, to put the matter ontologically, the meaning of a sentence need not be there, whereas the meaning of a (undefined) word must in some ontological sense be there. The explication takes us to the very heart of picturing, viz., that the picture manages to represent something because the elements of the picture stand for (i.e., are coordinated to) elements of the pictured. Therefore, even though the elements of the pictured do not stand as do the corresponding elements of the picture, one knows what state of affairs is pictured by "seeing" the picture.

Consider 'Bertrand Russell is short'. It is composed of three words. The first stands for a person; the third for a property; the second for a relation, viz., exemplification. One who knows what each word means knows the meaning of the sentence, i.e., knows what it would be for the person to exemplify the property or not to exemplify the property. Whether or not the person does, in fact, exemplify the property is immaterial. All that is material is knowing the meaning of the three words. Again, the puzzles surrounding the meaning of 'is' I ignore for the moment.
Ordinary language is, however, inconsistent with respect to the picture metaphor. Nor, considering its purpose, need it be consistent. Yet, being inconsistent, it produces philosophical bewilderment. For example, 'Bellerophon is a cow' is understood by many. Yet, there is nothing to which 'Bellerophon' refers. Or, consider what may in fact be even more puzzling, the case of 'Bertrand Russell'. To what does it refer? The question has confounded many. Unlike 'green' and 'red' it does not in any obvious sense refer to anything. Traditionally, two answers have been given. First, that it refers to a substance with which we are unacquainted. Second, it refers to a class of properties, i.e., it is a defined term. Both answers are, for numerous reasons, unsatisfactory. One need not conclude, as many do, that the picture metaphor has misled us. The proper conclusion is merely that ordinary language suggests questions which it cannot answer in any straightforward manner. Some philosophers have responded to this difficulty by recasting philosophical questions so that they apply to artificial languages. The advantages of this procedure are many. For example, one can construct a (physicalistic) language in which the device of definite descriptions takes care of both the 'Bellerophon' and the 'Bertrand Russell' case. Notwithstanding the controversial nature of these gambits
one can, at least, appreciate the motives behind them. They are the among motives which move Wittgenstein.

In the light of what has been said it is clear that ordinary language limits the application of the picture metaphor, at least in the manner explicated. In an improved language no such limitation appears. For, the language is explicitly designed to avoid that limitation. Every sentence of such a language satisfying (a), (b), and (c) is a picture. Accordingly, every term occurring in it refers to something with which we are acquainted. Thus, every sentence expresses a state of affairs which is a combination of such things. (Whether or not a language so stringently conceived can, in fact, reconstruct everything commonsensical is another question.) One might say that to stipulate a meaning criterion merely amounts to specifying a procedure for making linguistic pictures. This concludes the explanation of (1). Let me try to summarize it.

Every sentence of an improved language is a picture in the sense that understanding it enables one to recognize the state of affairs which it expresses without having been previously acquainted with that state of affairs. This is due to the meaning of the sentence being "composed of" the meanings of the signs and the rules by which they are strung together. In contrast, the meaning of a sign can only be
known if one has once been acquainted with its meaning, i.e., the thing meant. At least, that is so regarding undefined signs. The complications involved in the case of a defined sign (and of logical signs) I ignore for the moment. Putting the matter ontologically, there is no (ontological) thing which is the meaning of a sentence, though there is an (ontological) thing which is the meaning of a sign.

Before proceeding two comments will help clear the air. One. Though I have spoken freely about understanding and acquaintance, the psychology of understanding (a sentence) is not at issue. That is, how upon reading a sentence one "sees" what it "pictures" is another matter, one with which the psychologist, not the philosopher, is concerned. Two. Though a sentence has been spoken of as "having a meaning, as meaning something," it must be observed that this meaning is given to it by the one who makes the language when he deputizes its several signs (and their arrangements) to stand for certain entities. Wittgenstein at various times failed to appreciate both points. Thus, he fell victim to an imagist doctrine of thought on the one hand, and on the other, to an anthropomorphic view of language. In his later life he quite correctly rejected both. However, still failing to realize that these two views are not implied by the ideal language method in philosophy, he believed, incorrect-
ly, that their rejection entailed the rejection of that method.

According to the explication of (1), both analytic and synthetic sentences are pictures. Both fulfill the meaning criterion, i.e., both are well-formed strings of coordinated signs, and, to repeat, that is the basic ingredient of the picture metaphor. At this point a doubt may arise. Since analytic sentences are pictures, understanding them means that one knows what is the case (not the case) if it is true (false). The doubt I have in mind is this. Can one know what would be the case (not the case) if a contradiction (tautology) were true (false)? I, for one, believe the answer to be affirmative. However, many have believed it to be negative. Their belief rests on several confusions. Two are of immediate concern.

One. It has sometimes been said that an analytic sentence expresses a "law of thought." Therefore, to say that one knows what would be the case (not the case) if a contradiction (tautology) were true (false) seems to require that one "violate a law of thought." Without delving into the subtleties of the issue I wish merely to point out in what sense it makes to speak of understanding analytic sentences. Whether or not a sentence is analytic depends on its syntactical form. In that sense analyticity is relative to the
language. That is, many languages may support such a distinction. The important question is: Which language describes our world? Or, to put the question as I did before: Which language allows the transcription of everything commonsensically? One criterion which must be fulfilled if the language is satisfactory is that the analytic-synthetic distinction must, as best we can tell, be accurate. That is, if a sentence is a tautology, then the state of affairs which it expresses must always be the case. So, too, a contradiction must never express a state of affairs which is the case. But, then, to know that it does not obtain one must know what it would be for it to obtain.

Two. It is sometimes said that in an analytical sentence the descriptive constants occur vacuously (cf. 4.462). That merely means that the truth of an analytic sentence depends on the shapes of the descriptive signs and not on what they refer to. However, that has nothing to do with whether or not one understands a sentence. Because one can construct a language in which some sentences are deemed true in virtue of their form (syntactical) does not, as far as I can see, imply that such sentences are unintelligible, or that one cannot also verify them empirically. That nothing is both red and not red is so. Whether or not its reconstruction is analytic makes no difference.
Again, the analytic-synthetic distinction is not something which is decided a priori. The distinction, or, if you wish the language in which it is made, must be in some sense checked against the facts. One reason why that has not always been seen is that in speaking about making a language one often speaks of stipulating a meaning criterion. One can of course stipulate any criterion. But this does not answer the one important question: Does the stipulated language describe the world? The answer to that question is not a matter of stipulation. To be sure, most languages that are proposed as ideal do fit the world rather closely. That is due to our already possessing a good deal of knowledge about the world, and, thus, knowing what kind of a language is required. Again, such knowledge is in principle no different from knowledge concerning the color of this paper.

Most contemporary philosophers agree that the analytic-synthetic distinction is worth arguing for. They disagree, however, about how to argue for it, i.e., they disagree regarding its explication. One current and rather popular explication is that a tautology expresses a "grammatical rule" while a contradiction expresses, or is, a violation of the corresponding rule. Who accepts what has just been said naturally must reject that explication. So I merely
notice that it smacks of conventionalism. Conventionalism is indeed the other side of the a-priori coin in the peculiar sense that one who fails in his attempts at a satisfactory explication of the analytic-synthetic dichotomy will be tempted to rationalize his failure by embracing conventionalism. At least this happens in Wittgenstein's case. If my diagnosis is correct, it did not happen by chance.

II. (2) is merely a clumsy way of formulating a basic difference between analytic and synthetic sentences: The difference is this: the truth or falsity of a synthetic sentence is not revealed by its truth table; the truth or falsity of an analytic sentence is. Recall that one idea often associated with 'picture' is that from a picture one cannot tell whether or not the pictured exists or is the case. Therefore, guided by the picture metaphor, on the one hand, and, on the other, by the idea that an analytic sentence shows its own truth (or, falsity), one is led to conclude that analytic sentences are not pictures.

One significant question is: Does a sentence itself show its truth? The answer cannot be fully given here, for it requires a careful analysis of the meaning of the logical signs, or, more accurately, what is meant by 'the meaning of the logical signs'? Why such an analysis is required is
easily seen by considering a related question: What is the relationship between the meaning of a logical sign and its truth table? If one claims (a) that the sign's truth table is its meaning, then there is an obvious sense in which knowing the meaning of an analytic sentence is the same as knowing that it is true or false. Or, to express the point in the most general way, to identify the meaning of a logical sign with its truth table forces one to conclude that knowing the meaning of a sentence includes knowing whether it is synthetic or analytic. If, on the other hand, one claims (b) that the meaning of a connective is not its truth table (but, say, its formation rule), then knowing what a sentence means does not in any logical sense include knowing whether it is analytic or synthetic. Those who make the former claim appear to mix levels of discourse. For, whether or not a sentence is analytic is a metalinguistic matter. Moreover, the former claim appears to mix syntax and semantics, for the truth tables are in a trivial and obvious sense semanti-cal. Finally, such mixture also tempts one to assimilate meaning and verification. Those who hold (b) avoid these difficulties and temptations. However, their burden is to distinguish the meaning of a connective from its truth table. The burden is a considerable one. In the next chapter I shall examine what is involved in shouldering it.
A point which must not be overlooked is that no matter which of the two claims, (a) and (b), one thinks defensible both analytic and synthetic sentences are pictures in the sense of (1). They are both well-formed strings, or sentences. It would be vitiating to conclude from the difference between the two kinds of sentences that either one or the other is any more or less of a sentence. Wittgenstein did conclude that. His mistake, as I have indicated, results from his failure to appreciate the grammar of 'picture'.

There is another motive for denying that analytic sentences are pictures. Recall what was discussed awhile back under (ii). If picture and pictured share something, then there can be no picture of an impossibility. For instance, if spatial relations amongst the elements of the picture are made to represent spatial relations amongst the elements pictured, then one cannot picture what is spatially impossible. (Whether or not such impossibility is logical impossibility I ignore.) If that feature of the grammar of 'picture' is carried over to the linguistic case, then contradictions, since they can not be pictures, cannot be sentences. For, purportedly they picture impossibilities. Thus, there is nothing which they could share with what they depict. It follows that contradictions cannot be sentences. For, to repeat, if the picture and the pictured share logical
form and the pictured is logically impossible, then it is logically impossible that there be a form to share. Thus, it is logically impossible that there be a picture. The conclusion is mistaken. Contradictions, we saw, are well-formed. They are sentences. (If one has followed the above discussion carefully one will have noted an ambiguity regarding 'possible'. To it I now turn.)

The conclusion is reached by crossing the verbal bridges built by the ambiguities of 'picture'. The crossing is facilitated by an ambiguity of 'possible'. Consider the following passages.

2.0121 Logic treats of every possibility, and all possibilities are its facts.

3.2 What is thinkable is also possible.

4.116 Everything that can be thought at all can be thought clearly. Everything that can be said can be said clearly.

In 2.0121 'possible' means linguistically possible (well formed). In other worlds, logic in the sense of ideal language (and how else could 'logic' be used in that passage) deals with all sentences, all well-formed strings. This is one meaning of 'possible'. There is another. A possibility is what is expressed by a synthetic sentence (cf. 5.525). If these two uses are not carefully distinguished, one might well come to say that what is "thinkable" is what is expressed by a synthetic sentence (3.2). Furthermore, identify-
ing the thinkable with the expressible (4.116), one may con-
clude that what a contradiction says cannot be expressed, and
that, therefore, contradictions in some unexplicated sense
are not sentences at all. The point is, again, that if the
picture and the pictured share something, then what cannot
occur in the realm of the pictured cannot occur in the
realm of the picture. That is the heart of the matter.
Wittgenstein, laboring under the notion that language and the
world share logical form, is led to believe that analytic
sentences are not really sentences at all; being, at best,
sentences about the language. The correct view is that what
is possible in the language and what is possible in the world
are not the same. (We can think (say) the impossible.) One
can express the impossible, for contradictions are meaningful.
Any attempt to make linguistic possibility (formation rules)
and logical possibility (truth tables) coincide (be coexten-
sive) is mistaken. The sources of that mistake are, I hope,
evident.

III. I turn now to the explication of (3), which is
the same as (A).

Consider the following schema, L. L contains signs of
two shapes and one rule for forming sentences, viz., two
juxtaposed signs, one of each shape, constitute a sentence.
L, therefore, contains only atomic sentences. Interpret L,
which syntactically (geometrical) considered is merely marks on paper, by letting the two shapes of signs, call them the \( x \) shapes and \( f \) shapes, stand for individuals and characters, respectively. In order to represent the several characters and individuals, differentiate the members of each shape by subscripts. Furthermore, let the juxtaposition relation which obtains between the signs in a sentence represent exemplification, the relation which obtains between an individual and a character in a fact. Thus, there is a one-to-one coordination between the signs and the things (or, objects) and between juxtaposition and exemplification.

There is, however, one other important feature of the coordination, viz., that things of the same kind are coordinated to signs of the same shapes. That is, all individuals are represented in \( L \) by signs of the \( x \) shape; all characters, by signs of the \( f \) shape.

In what sense is a sentence of \( L \) a picture? A sentence is a picture in that if it is true, the things represented by the signs stand in the ontological relation (exemplification) represented by the syntactical relation (juxtaposition) in which the signs stand. Picturing, then, in the case of atomic sentence consists of a one-to-one coordination between signs and things and between juxtaposition and exemplification. This, I submit, is the explication of (3) and of (A). As such, it is straightforward and unproble-
matic. Nor, of course, is it original. Wittgenstein says, more or less, the same thing in the *Tractatus*. Consider the following string:

2.13 To the objects correspond in the picture the elements of the picture.

2.131 The elements of the picture stand for the objects.

2.15 That the elements of the picture are combined with one another in a definite way, represents that the things are so combined with one another.

3.141 The proposition /sentence/ is not a mixture of words... It is articulate.

3.142 Only facts can express a sense, a class of names cannot.

4.014 The gramophone record, the musical thought, the score, the waves of sound, all stand to one another in that pictorial relation, which holds between language and the world. To all of them the logical structure is common.

4.0141...

In the fact that there is a general rule by which the musician is able to read the symphony out of the score, and that there is a rule by which one could reconstruct the symphony from the line on the gramophone record and from this again - by means of the first rule - construct the score, herein lies the internal similarity between those things which at first sight seem entirely different. And the rule is the law of projection which projects the symphony into the language of the musical score. Its the rule of translation of this language into the language of the gramophone record.

4.0311 One name stand for one thing, and another for another thing, and they are connected together. And so the whole, like a living picture, presents the atomic fact.
4.0312 The possibility of propositions is based upon the principle of the representation of objects by signs.

4.032 ... The proposition is a picture of its state of affairs, only in so far as it is logically articulated.

4.126 ... The mark that signifies the characteristics of a formal concept is...a characteristic feature of all symbols whose meanings fall under it.

2.13, 2.131, 4.0311, and 4.0312 all stress the coordination of sign to object, or, more precisely, stipulate one requirement which must be fulfilled if an atomic sentence is to be a picture, viz., that each sign represent an object. If this were not so, the string would have no meaning; it could not express a state of affairs. That requirement does not suffice, though. For, merely to represent the objects does not specify how they are related. Thus, failing a further requirement a sentence could not be deemed true or false, i.e., it would not be a sentence at all, but only a "class of names." 2.15, 4.141, 3.142, and 4.032 all stress this further requirement. A sentence must be articulate, a "fact," and so forth, if it is to be capable of representing a fact. Its being articulate means only that it is the result of a rule. That being so, there is in the sentence a relation between the signs which can represent the relation between the things. Thus, a sentence is able to say how
things stand.

In passing, it is worth noticing that Wittgenstein is unclear about exemplification. For example, in 2.15 he seems to suggest that the relation between the signs and the relation between the things they represent are the same. His confusion, as we shall see, stems from his doctrine of logical form, that is, that language (the picture) and the world (the pictured) share logical form.

4.014 and 4.011 both reiterate that picturing is based on a "rule of projection," or on the representation of things by signs and on a correspondence between a relation amongst the signs, on the one hand, and that obtaining among the elements of the state of affairs, on the other. 4.126 reveals Wittgenstein's awareness that in an interpreted schema kinds of things are represented by shapes of signs. In L, for example, there is no sentence, 'f₁ is a universal'. Rather, that fact is expressed by the universal being represented by a sign of a certain shape. To put the point otherwise, that a thing is of a certain kind shows itself. That, incidentally, explicates one aspect of Wittgenstein's ineffability thesis.

In the Tractatus the picture notion is carried further. Desiring to incorporate the idea of "sharing" into the linguistic context, it is urged that the language and the world
share *logical form* (2.17). The italicized phrase needs explication. The explication has three parts. 1'. The relation (juxtaposition) between the signs in the sentence stands for the relation (exemplification) between the things represented. 2'. Things of the same kind are represented by signs of the same shape. 3'. The shapes which combine in L to make a sentence show which things can combine to make a fact. (1') and (2') are discussed above. I turn to (3').

An atomic sentence may or may not be true. If it is true, what it pictures is the case (2.19, 4.26). If it is false, what it pictures is not the case, for the objects are not combined in the relation corresponding to the relation in which the signs are. But they could have been. That suggests what (3') expresses. That is, the formation rules of L stipulate among other things which juxtaposed shapes make a sentence. They do not stipulate which sentences are true, though. However, if the sentence is to be a picture then it must express a state of affairs which may obtain. Or, to put the matter otherwise, a false sentence must be a picture, i.e., a false sentence must be meaningful.

There is nothing magical in all this. L is just constructed in that way. That is, the rules are arranged in accord with what is known about what kinds of objects go to-
gether. There is no a priori intuition in that. There is just the attempt to construct a language which does accurately reflect which kinds of things do combine in facts. If the language should fail, i.e., if there should occur a state of affairs which cannot be expressed in the language, then there is nothing to do but alter the language. Such failure is merely the inability of the language to describe the world. Or, in other words, the language does not fulfill a condition which must be fulfilled before it can be said unqualifiedly. that every sentence is a picture, or, at least, that every atomic sentence is a picture. That is, one does not know absolutely that the formation rules do in fact allow everything. One does know it, though, in the sense in which one knows that a generalization is true. Thus, one says that every sentence is a picture.

To understand more clearly Wittgenstein's doctrine of logical form consider the following string:

2.16 In order to be a picture a fact must have something in common with what it pictures.

2.161 In the picture and the pictured there must be something identical in order that the one can be a picture of the other at all.

2.17 What the picture must have in common with reality in order to be able to represent it after its manner - rightly or falsely - is its form of representation.

2.171 The picture can represent every reality whose form it has.
The spatial picture, everything spatial, the coloured, everything coloured, etc.

2.15 That the elements of the picture are combined with one another in a definite way, represents that the things are so combined with one another. The connexion of the elements of the picture is called its structure, and the possibility of this structure is called the form of representation of the picture.

2.151 The form of representation is the possibility that the things are combined with one another as are the elements of the picture.

2.032 The way in which objects hang together in the atomic fact is the structure of the atomic fact.

2.033 The form is the possibility of the structure.

2.201 The picture depicts reality by representing a possibility of the existence and non-existence of atomic facts.

2.203 The picture contains the possibility of the state of affairs which it represents.

2.22 The picture represents what it represents, independently of its truth or falsehood, through the form of representation.

2.19 The logical picture can depict the world.

4.26 The specification of all true elementary propositions describes the world completely...

The string stipulates the requirement I called \( (3') \) which a sentence must fulfill if it is to be a picture. The other two, we recall, are that \( (1') \) the relation between the signs must be coordinated to the relation between the things, and \( (2') \) there must be a one-to-one coordination between the signs and things. Since \( (3') \) is crucial, let me repeat it.
Since the sentence expresses what it does regardless of whether it is true or false, it must represent a possible combination of objects. That it can do so, results from the language having been constructed in that way. Wittgenstein wishes to argue that the reason why the language can do it is that the language and the world share *logical form* and, thus, what is possible in the language is possible in the world.

Wittgenstein, since he claims that the language and the world share logical form, fails to distinguish the two meanings of 'possible' I distinguished awhile ago. More accurately, he fails to realize that linguistic possibility (well-formed) and logical possibility (synthetic) are not coextensive. That is why he says what he does in 2.15, 2.151, 2.17 and 2.203. If one limits oneself to atomic sentences, there is still another reason for that failure. All atomic sentences are synthetic. Thus, linguistic possibility and logical possibility are coextensive. Lest someone conclude that Wittgenstein's conclusion is on firm ground, recall that the analytic-synthetic distinction applies only to a language which contains more than atomic sentences. In L, for example, the distinction makes no sense.

The mistake regarding possibility re-enforces another erroneous tendency of his thought. By arguing that the form
of the fact expressed and the form of the fact which is the sentence are identical, he undertakes to secure an a priori order of possibilities (in both senses). Let me explain.

Consider the sentence \('x_1f_1'\). As I explicate 2.15 and 2.151, its structure is that \('x_1'\) and \('f_1'\) are juxtaposed. Its form, "the possibility of its structure," is that one sign is an \(x\) shape, the other an \(f\) shape, and that the rule for sentences allows their combination. But clearly the fact does not have this form, or, rather, I do not know what could be meant literally by the form of the fact. One can only explicate the 'form of a fact' by talking about the syntactical form of the sentence referring to it.

To be convinced that the fact expressed by \('f_1x_1'\) and the fact which is the sentence \('f_1x_1'\) do not have the same form, consider what kind of sentence would be required to express the fact which is the sentence. \('f_1x_1'\) is not the sentence! It is the name of a sentence. The sentence expressing the fact which is the sentence would have to state that there is an individual with a character to the left of another individual with a different character. The respective facts do not even have the same number of constituents. How could they share logical form in the sense in which I explicate it? And, to repeat, I do not know what else could be meant. However, I have, I hope, made plausible how one
might be misled into saying that they share logical form in some unexplicated sense.

To be convinced that what Wittgenstein is striving for is indeed some a prioristic, or absolute notion of form, (or, as I would rather say, of being well formed), in the area of atomic sentences which so preoccupied him, one need only consider the following passage from the *Investigations*. It effectively restates his earlier attitude.

Thought is surrounded by a halo. -Its essence, logic, presents an order, in fact the a priori order of the world; that is, the order of possibilities, which must be common to both world and thought.../97/

There is yet a deeper Kantian strain in the *Tractatus*. One passage will suffice to uncover it.

6.34 All Propositions, such as the law of causation, the law of continuity in nature...are a priori intuitions of possible forms of the propositions of science.

Wittgenstein, then, says what he does about logical form because, on the one hand, he succumbs to the picture metaphor, and, on the other, because he desires to secure an absolutistic notion of possibility in the sense of well formed. That is, he hopes to tell from language alone, prior to all interpretation, so to speak, which combinations of objects are possible. In this belief, he inevitably construes the form of language as the form of thought. That is the bridge to (or, from) the Kantian view that the world has the form it has only in the sense that this "form" is the
only way in which we can think the world.

Consider:

5.6 The limits of my language mean the limits of my world.

5.61 Logic fills the world; the limits of the world are also its limits.

... What we cannot think, that we cannot think; we cannot therefore say what we cannot think.

5.62 ...

That the world is my world, shows itself in the fact that the limits of the language (the language which I understand) mean the limits of my world.

There is no need to pursue this line of thought here, or to explicate what is sound in it. The theme will re-emerge.

The Kantian influence pervades the Tractatus. Here, I merely wish to stress a contrast which I pointed out above. The ideal language method is provisional in character in that it makes no sense to say that one knows a priori that the language chosen is in fact the ideal language.

Two further points are worth noticing. One. Wittgenstein in identifying the form of the language with the form of thought tends to blur their differences (cf. 4.114-4.116) The blur between language and thought creates a slope toward behaviorism. Not surprisingly, as we shall see, Wittgenstein in attempting to solve the problem of intentional contexts does identify thought with language, an idea which, as we saw, persists into the Investigations. Two. Wittgenstein fails to distinguish between linguistic possibility (well
formed) and logical possibility (synthetic). That failure leads to the view that analytic sentences are, in some peculiar sense, ill-formed, i.e., they are not "really" sentences. In the early work that view is covert, in the later work it is overt. There it is held that a tautology expresses a grammatical rule and a contradiction is a violation of a rule. In the early work he still held that they were the boundaries of language, the "logical scaffolding," of the language, which he sometimes calls "logical space." (cf. 3.42, 4.4001, and 6.124).

Before turning to (B), it might be well to summarize briefly the preceding discussion in this chapter. I began by exhibiting part of the grammar of 'picture', calling attention to those ideas most often associated with picturing. Then I examined how those ideas are applied to language, and how Wittgenstein might have been led from the legitimate sense in which language is a picture (i) to the illegitimate senses of that word (e.g., (ii)). The result of that examination was an insight into the origins of the doctrine of logical form which is purportedly shared by language (thought) and the world. I then showed how that doctrine is related to his Kantianism, i.e., to his absolutistic view of possibility in both senses of that word. Finally, it was shown how the ambiguity of 'possible' facilitates the confusion.
One point which I have stressed is his treatment of analytic sentences; in particular, his attempt to place them outside the language, his denial that they can be thought, and so on. One obvious reason for stressing this point is that it shows how intimate some of the connections are between his earlier and his later views. However, there is another reason for this emphasis. Wittgenstein's treatment of analytic sentences is symptomatic of his attempt to undermine the ontological status of logic. That problem is at the heart of (B), to which I now turn.
(B), we recall, states that a (synthetic) molecular sentence *pictures* through its atomic constituents. That use of 'picture' is different from each of the four examined in the preceding chapter. For convenience let me exhibit them again. (i) A sentence is a picture. (ii) Analytic sentences are not pictures. (iii) A true sentence is a picture. (iv) An atomic sentence is a picture. The use of 'picture' in neither (iii) nor (iv) is the same as that in (B). That is obvious. Nor is its use in (i) or (ii) the same as that in (B). That may not be so obvious. To be convinced, consider first, that in order to say merely that synthetic molecular sentences are not analytic, the qualification introduced by 'through' is unnecessary, and, second, that if one wanted to say, as I would, that a molecular sentence is a picture in sense (i), the qualification would not be required. In fact, it would be misleading, since it suggests that in analysing the meaning of a molecular sentence the meaning of the connectives may be ignored. That is not so. For example, 'This is red and this is square' and 'This is red or this is not square', though both contain the same atomic constituents,
namely, 'This is red' and 'This is square', have different meanings. The difference is due solely to the meanings of 'and', 'or', and 'not'.

(B) is intended to express that the truth or falsity of nonanalytic molecular sentences depends (truth-functionally) on the truth and falsity of their atomic constituents. (B) therefore, at least as intended by Wittgenstein, may be explicated analogously to (i): to know the meaning of a (synthetic) molecular sentence is to know what atomic facts would be the case if it were true. 'Atomic' introduces an unnecessary qualification, though it is one upon which Wittgenstein insists because he is reluctant to speak about the meaning of the connectives on the one hand, and, on the other, of facts other than atomic facts. His reluctance, as I shall show, is ill grounded. That is why I said that the qualification, 'atomic', is unnecessary.

To uncover the motives behind this reluctance as well as to demonstrate that it is ill grounded is the task I set myself in this chapter. Or, to say the same thing differently, my purpose in this chapter is to analyse Wittgenstein's position on the ontological status of logic.

I begin with an admission. (B) is not asserted in the Tractatus. It is merely implicit in it. Therefore, I shall first justify imputing it to Wittgenstein. Consider the
following passages:

2 What is the case, the fact, is the existence of atomic facts.

2.034 The structure of the fact consists of the structures of the atomic facts.

2.04 The totality of existent atomic facts is the world.

4.0312 ... My fundamental thought is that the "logical constants" do not represent. That the logic of the facts cannot be represented.

5.4611 Logical operation signs are punctuations.

4.1 A proposition presents the existence and nonexistence of atomic facts.

4.3 The truth-possibilities of the elementary propositions mean the possibilities of the existence and nonexistence of the atomic facts.

4.4 A proposition is the expression of agreement and disagreement with the truth-possibilities of the elementary propositions.

4.41 The truth-possibilities of the elementary propositions are the conditions of the truth and falseness of the propositions.

4.431 The expression of the agreement and disagreement with the truth-possibilities of the elementary propositions expresses the truth-conditions of the proposition. The proposition is the expression of its truth-conditions. (Frege has therefore quite rightly put them at the beginning, as explaining the signs of his logical symbolism...)

4.441 It is clear that to the complex of the signs 'T' and 'F' no object (or complex of objects) corresponds; any more than to horizontal and vertical lines or to brackets. There are no "logical objects." Something analogous holds of course for all signs,
which express the same as the schemata of 'T' and 'F'.

4.442 Thus e.g.

<table>
<thead>
<tr>
<th>p</th>
<th>q</th>
</tr>
</thead>
<tbody>
<tr>
<td>T</td>
<td>T</td>
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<tr>
<td>T</td>
<td>T</td>
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<tr>
<td>F</td>
<td>T</td>
</tr>
<tr>
<td>T</td>
<td>F</td>
</tr>
<tr>
<td>F</td>
<td>T</td>
</tr>
</tbody>
</table>

is a propositional sign.

5.25 The occurrence of an operation does not characterize the sense of a proposition.
For an operation does not assert anything; only its result does, and this depends on the basis of the operation.

5.42 That ∨, ∩, etc., are not relations in the sense of right and left, etc., is obvious.
The possibility of crosswise definition of the logical "primitive signs" of Frege and Russell shows by itself that these are not primitive signs and that they signify nothing.

5.461 ... The apparently unimportant fact that the apparent relations like ⊃ and ∨ need brackets - unlike real relations - is of great importance.
The use of brackets with their apparent primitive signs shows that these are not the real primitive signs; and nobody of course would believe that the brackets have meaning by themselves.

5.512 '¬p' is true if 'p' is false. Therefore in the true proposition '¬p' 'p' is a false proposition.
How then can the stroke '¬' bring it into agreement with reality?
That which denies in '¬p' is however not '¬', but that which all signs of this notation, which deny p, have in common.
Hence, the common rule according to which

'¬p', '¬¬p', '¬p ∨ p', 'p ∨ ¬p'
etc. etc. (to infinity) are constructed. And this which is common to them all mirrors denial.

Now for five comments.

1. Atomic facts are basic. That is the import of 2 and 2.04. Nonatomic facts, i.e., facts referred to by true non-atomic sentences, are in some sense composed of atomic ones. That is the import of 2.034. The idea of composition invoked in 2.034 remains unclarified, though. On that topic Wittgenstein is silent. One possible reason for his silence is that he realizes, on the one hand, that what is said in 2.034 is unsatisfactory and, on the other, that what must be said in order to make it satisfactory he has already denied. To see that 2.034 is unsatisfactory consider that according to it the facts expressed by \('p_1 \cdot q_1'\) and \('p_1 \lor q_1'\) have the same structure. If Wittgenstein were willing to admit that the connectives represent, there would be no problem. For, one could then say that the molecular fact is composed of atomic facts and what the connective in question represents. However, since he is unwilling to admit that "logical objects" are part of the ontological fabric of the world, he cannot give an intelligible account of the way in which molecular facts are composed of atomic ones.

As we saw in the preceding chapter, 'the structure of a fact' and 'the form of a fact' require explications which must be given in terms of the syntactical structure and form
of the sentence referring to the fact. Accordingly, the facts $p_1 \cdot q_1$ and $p_1 \lor q_1$ have different structures since the sentences referring to them have different syntactical structures. That difference depends, of course, on the connectives which, from where I stand, play a representing role. That is precisely what Wittgenstein is unwilling to admit. Thus, to repeat, I must show his unwillingness to be ill grounded. Of that later. For the moment I pursue the notion that atomic facts are basic.

There are two reasonable senses in which atomic facts can be called basic. First, they are bedrock in verification. That is shown by the truth tables. However, even in the case of a general statement they are basic. The verification of a general statement is piecemeal, proceeding by way of atomic statements. That does not mean, however, that a general statement is logically equivalent to a conjunction of atomic ones. Nor does it mean that the latter is what is meant by the former. It merely means that is how we verify such statements. Second, atomic facts are basic in the sense that atomic sentences are prerequisites for the introduction of the connectives (and the operators, for that matter). That is, the formation rules for the connectives require that there be nonconnective sentences. Neither kind of "basicality" entails that the connectives do not represent.
Both kinds of basicality have caused confusions, though. For example, that general statements are verified piecemeal has caused some philosophers to argue that the operators are eliminable; which in turn creates a slope to the Positivists' view that verification and meaning are one thing and not two. Another confusion is the following. Many philosophers wish to say that some things (complexes) are really composed of other things (simples). For instance, I would defend the view that atomic facts are "composed" of things, specifically, of simples. However, one who does decompose such "complexes" must not neglect what holds them together. Thus, in the case of an atomic fact, one must beware that exemplification be not lost in the process of decomposition. Similarly, that molecular facts can be decomposed into atomic facts does not mean that the connectives are nothing. Yet, many philosophers, including Wittgenstein, have so argued. That is, they have taken the rejection (denial of ontological status to) of molecular facts to be a rejection of "logical objects," just as others have taken the rejection of atomic facts to be a rejection of exemplification. Nothing is more mistaken. Rather, it would seem that the decomposition should lead one to appreciate how essential logical objects are.

Wittgenstein's attempt to decompose all nonatomic facts
into atomic ones appears to give testimony to his being a fact ontologist. The appearance is just that, an appearance. In reality, he is thing ontologist (cf., 2.02, 2.021, 2.023, 2.024, and 2.027). Ironically, it is his vigorous defence of simples (that are things, not facts) which is partly responsible for his undermining logic. However, that may be, one might wonder why he is so bent upon destroying nonatomic facts. The reason is that he mistakenly construes the denial of molecular facts as a denial of "logical objects." Ironically, again, the truth is just the other way around. The admission of molecular facts as existents would make them simples. For, what is said to exist is also claimed to be simple. Conversely, any decomposition of molecular facts entails the acceptance of logical objects, though it does not entail that there are atomic facts. To be sure, the decomposition must be executed carefully. For, one does not want to claim that there is no categorial difference between logical and descriptive objects. Nor, as we shall see, need one.

2. In the ontological sense, there are no logical objects. That is the burden of 4.0312 and 5.4611. (I use 'logical object' loosely. Later I shall tighten its use. For the purposes immediately at hand that is unnecessary.) Again, Wittgenstein is too vigorous. To claim that the connectives are punctuations is to fail to realize how impor-
tant they are. To repeat, the difference in meaning between \( p_1 \cdot q_1 \) and \( p_1 \lor q_1 \) is due solely to the meaning of the connectives. 5.4611 gives the appearance that the connectives are merely to separate the words. However, even on Wittgenstein's view (4.431) that is not so. If a molecular sentence is to express the existence and nonexistence of atomic facts, the connectives are indispensible. For, how else would one know which are asserted to exist and which are not? One may wish to say that the connectives do not represent something in the world, but it is sheer folly to claim that they represent nothing. One rather intriguing structural connection comes to mind at this point. Since the meaning of a connective must be grounded, it must be grounded in mind if not in the world. Since Wittgenstein implicitly holds that mind is nothing, it is not startling to find him suggesting that the connectives, since they do not represent anything in the world, therefore represent nothing.

3. The rest of the passages, from 4.1 on, amount to an explicit argument for (B), i.e., for the claim that a molecular sentence merely asserts the existence and nonexistence of atomic facts (4.431); or, as I should prefer to say, these passages amount to an argument for the claim that the truth table representation of a molecular sentence is a propositional sign, is an inescapable consequence of that argument.
That is, if one wishes to deny that molecular sentences express molecular facts, one is forced to hold that they really express that certain other sentences, namely, their atomic constituents, are true or false. Two immediate points are worth noticing. First, the truth table is made part of the object language. Thus, syntax and semantics become mixed. Second, insofar as that is so one has not really achieved anything. For, the truth tables, if I may so express myself, are shot through and through with the connectives. Let me explain. \( p_1 \cdot q_1 \) is claimed to state that \( p_1 \) is true and \( q_1 \) is true. The italicized 'and' is fatal. Nor can it be avoided. Indeed the horizontal and vertical lines of the truth table scaffold are the connectives. The connectives are an essential part of the truth tables when we speak about them. Accordingly, the truth table rather than ground the meaning of the connectives, presupposes it. Of this more later. The immediate point to grasp is that Wittgenstein proposes the truth tables as a definition of the connectives. That proposal is doomed at the outset. That is what I have shown.

4. (1), (2), and (3) justify the imputation of (B). For, (B) merely says that the fact expressed by a molecular sentence is really not a fact at all but a combination of atomic facts. Moreover, it implies precisely what Wittgen-
stein is willing to accept, namely, that the meaning of the connectives is not grounded in the world, i.e., that the connectives represent nothing which could be considered as part of the ontological fabric of the world.

5. Three rather broad structural observations will serve to locate Wittgenstein's discussion of the connectives within his over-all program. First. Recall that one mission of the picture theory is to rid the world of Frege's truth values. Applied to atomic sentences the theory succeeds. The truth tables succeed in the case of molecular sentences. That is, to say that a molecular sentence is true does not require the reification of the True. For, as the truth tables reveal, to say that a molecular sentence is true is no more than to say that certain atomic sentences are true. And that, of course, does not require the reification of truth values. This result Wittgenstein was above all anxious to secure. Thus, he neglected the further problem of somehow grounding the connectives. In turn he was led to hold that they are not part of the facts. Second. Wittgenstein's exclusion of the connectives jibes with his insistence that the world contains only atomic facts. As we saw, he believed, incorrectly, that if the world did not contain molecular facts, it did not contain the connectives. Furthermore, his preoccupations with Frege's truth values and, in turn, with
the nature of verification explain his preoccupation with atomic facts. Strangely enough, as I see the world, speaking ontologically, contains no facts at all, not even atomic ones. Yet, it contains what holds the existents together into facts! Exemplification, negation, conjunction, and so forth, are in the world. Facts are not. Third. Recall that Wittgenstein took the picture metaphor rather literally. For instance, in 2.15 he suggests that the relation between the signs and the relation between the things they represent are the same. In the case of atomic sentences the view has a specious plausibility. There is, however, no such plausibility in the case of the molecular sentences. There are no things represented by the connectives which could in any way be construed as standing in "spatial" relations with descriptive objects. Thus, Wittgenstein, laboring under a literal application of the picture metaphor, quite naturally rejects logical objects. The point, of course, is that the spatial metaphor is only a metaphor, even when applied to atomic sentences. A sentence, as we saw, is just not a picture in the sense that it shares a relation (logical form) with what it pictures, or represents. Incidentally, his literal use of the metaphor also causes him to ignore the ontological ground of exemplification. All this we shall see later. The point here is that a careful analysis of the picture theory re-
veals one prominent reason for Wittgenstein's rejection of logical objects.

Before probing further it might be prudent to state the issues of the ontological status of logic as clearly as possible and distinguished it from certain other issues. I, for one, join hands with Wittgenstein in the attempt to eliminate ontologically Frege's twin monsters, the truth values. However, in order to effect their elimination one need not eliminate (deny some ontological status to) logical objects. The two issues are dialectically distinct. The truth values are eliminated by illuminating the nature of verification, on the one hand, and, on the other, by transcribing in the ideal language a predicate which on interpretation means 'true'. Whether or not Wittgenstein saw these issues to be distinct is another matter. Certainly, insofar as he attempts to define the connectives in terms of the truth tables he appears to think of them as dialectically inseparable. Yet, one can, and I shall, defend the view that the connectives represent something without embracing the True and the False as existents.

Wittgenstein's denial that logical signs represent is firmly rooted in commonsense which refuses to admit that logical objects are out there in the same sense that descriptive objects are. On the other hand, commonsense feels no con-
straint in speaking about such facts as a man being tall and thin. Accordingly, commonsense does acknowledge logical objects. Of course one might counter that commonsense acknowledges everything. Quite so. But that merely re-enforces the point. It is not the philosophers task to contest commonsense. It is merely his task to call attention to the sundry ways in which commonsense distinguishes amongst the kinds of things which are in the world. These distinctions are the key to all philosophical problems.

The question is: What does it mean to reify logic? For, that is what Wittgenstein objects to, and, for that matter, what all philosophers objects to. However, Wittgenstein claims that any admission that logical signs refer is to reify logic. That answer I reject. From where I stand, my feet firmly planted in commonsense, the reification of logic is the failure to distinguish between logical and descriptive objects, thus claiming that both exist in precisely the same way. The task therefore is to give logic its ontological due while making lucid the sometimes obscured difference between it and descriptive objects. That task Wittgenstein fails to perform. He secures the difference at the prohibitive price of banishing logic from the world.

In passing it is worth noticing that in 5.42 Wittgenstein argues from "the possibility of the crosswise defini-
tion of the logical 'primitive signs'" to the claim that "these signs are not primitive signs and that they signify nothing." The argument is compelling only if one ignores a vital distinction. To appreciate that consider the following question: If there were a logical primitive, would it follow that logic exists? Of course not. There is still a distinction between logical and descriptive. In fact, exemplification is a simple logical object which happens to be represented not by a sign but by a geometrical relation between descriptive signs. That difference makes no difference here. The point is that there is still a distinction between exemplification and, say, to the left of. In order to make that clear let us examine the backdrop of Wittgenstein's argument.

Consider the following three sentences: The name cannot be analyzed further, it is a primitive sign of the ideal language (3.26). Objects I can only name (3.221). The object is the existent (2.027). These sentences amount to Wittgenstein's explication of the ontological enterprise. He believes that what exists is what is referred to by a primitive sign. Therefore, from the fact that there is no primitive connective he concludes that no logical object exists. Clearly, he has failed to appreciate the significance of the distinction between logical and descriptive signs. For him,
all ontological commitment is determined by the distinction between defined and undefined signs. Accordingly, if there were a primitive connective Wittgenstein would be forced to reify logic. For, he would be forced to say that a logical object exists. From where I stand, one could still say that logical objects, though they exist, are nevertheless sharply distinguishable from things.

Of course, the crosswise definition of the logical signs is different from the definition of a physical object. The former definition is in terms of tautological equivalence. Thus, the difference between logical and descriptive signs is further secured. Moreover, this difference cautions one against employing the ontological criterion for descriptive things to logical objects. For example, though exemplification is the only logical object which may be called a simple object need not say it exists in the same way that a descriptive relation does. On the other hand, one must grant it ontological status. For convenience, it may be said to subsist. Or, to say the same thing cautiously, that is one possible explication of 'subsist'.

Below I shall have more to say about the lack of a primitive connective. For the moment I wish to make a few selective and brief historical observations which will help to illuminate the issue of logic's ontological status.
Kant, as everyone knows, argued that logic, or more aptly, logical form, is mind's contribution. Structurally speaking, he hoped thereby to secure an absolutistic doctrine of analyticity. Some of the verbal bridges he crossed in arriving at his position are easily mapped. For example, what is given by mind is in some sense prior to what is given by experience, i.e., given from without. However, no matter how he arrives where he did, we know why he went there. That uncovers one motive for banishing logical form from the world. Not surprisingly, therefore, Wittgenstein also bansihing logic from the world espouses an absolutistic doctrine of analyticity. Frege, in contrast, went to the other extreme. He reified logical form, and, for that matter, everything. His motive is his vigorous reaction to psychologism. Wittgenstein reacts to Frege's exuberant ontology, though he remains vigilant against psychologism. Implicitly he sides with Kant. However, his opposition to psychologism drives him to behaviorism, which prohibits him from locating logic anywhere. Thus, it becomes an ontological orphan, unsheltered even by mind. Yet, in a few scattered passages which are examined below, he at least acknowledges the problem.

What specifically are the inadequacies of Wittgenstein's suggestion that the truth tables define the connectives?

1. The supposed definitions are circular. That much I
have shown. To grasp it, consider \( p \lor q \). According to the truth table "definition" of \( \lor \), the sentence is really its truth table. However, the truth table presupposes the connectives. A disjunctive sentence may be true if either one or both of its constituents is true. Those conditions cannot be neglected. If they are, one cannot distinguish the wedge from the dot. At best one shifts the connectives to the metalanguage, confusing in the process syntax and semantics. The circularity, however, is not that essential circularity which is part and parcel of the philosophical enterprise, the circularity which is due to one's having to begin somewhere. Or, to say the same thing differently, it is not the essential circularity which is due to philosophy not being presuppositionless. The circularity of which I accuse Wittgenstein is of a different and more vital order. He believes that one actually gets rid of the connectives, being left only with atomic sentences and the truth values, which, as the picture theory reveals, are ontologically harmless.

My point is that the logical connectives must also be interpreted. That we happen already to know what they mean points to the circularity of the philosophical enterprise. The connectives are interpreted by letting them represent just what the logical words into which they are interpreted represent. The advantage of this procedure is that by making them
syntactically precise we can clarify certain philosophical
issues. Of course, to say that the logical words represent
"logical objects" is awkward, for 'object' carries unsuitable
connotations. Nevertheless they represent something, call
it what you will. The troublesome issue is to determine the
relationship between the meaning of a connective and its
truth table. That is, since the connective as interpreted
represents something which, as I have argued, is distinct
from its truth table, one must make lucid the relation be­
tween the two.

Two comments which are frequently made may be brushed
aside immediately. First, it is frequently said that the
truth tables **standardize** the meaning of the connectives. That
merely means that the truth table applies to a specific use
of the connective. For instance, the use of 'and' which bears
a temporal burden and is used in contexts where order is im­
portant, is not the use of 'and' into which the dot is inter­
preted. Yet, the standardization is neither an explication
nor a definition, it is, if you will, an isolation. That iso­
lation is achieved by pointing to the conditions under which
the "relation" represented by the dot obtains. Second, the
connectives are said to admit of "crosswise definition." That
definition is of a peculiar sort, depending as it were on
tautological equivalence which, in contrast to stipulative de-
inition, is not legislated. It amounts to saying that cer-
tain signs, or combinations of signs have the same meaning
because the sentences which contain them have the same logi-
cal meaning, i.e., they are tautologically equivalent. Such
crosswise definition is a purely mathematical affair, achieved
by means of the truth tables. That kind of definition real-
izes the notion of implicit definition far better than any
other sort. The truth table equivalences do show us which
combinations of connectives mean the same thing. Or, more
precisely, they show how one can attain the same logical
power with less. Nonetheless, such definitions do not direct
us towards what the connectives represent, as do reconstruc-
tions. One begins with what the connectives represent.

The relationship between the connective and its truth
table is deceptively simple. The truth table merely expres-
ses the conditions under which the represented logical re-
lation obtains. That is, the truth table stipulates the con-
ditions under which a molecular fact is the case. In so
doing, it stipulates the conditions under which a logical
relation obtains. The picture theory, properly handled, does
the same thing for exemplification. The point is that to say
that a molecular sentence is true is to say that a molecular
fact is the case. If one would rather say that a certain
molecular sentence is true means that certain atomic facts
are the case, one may safely do so, provided one remembers that for saying it the connectives themselves are needed. Thus, at least an implicit appeal to molecular facts is made after all. For, what is the difference between saying that $p_1$ and $q_1$ is the case, and $p_1$ is the case and $q_1$ is the case? Nor is there any difference if the matter is stated metalinguistically, i.e., in terms of sentences being true.

2. Wittgenstein, in order to secure his position, is forced to use 'fact' philosophically. Speaking commonsensically, all descriptive sentences express facts. How one verifies a sentence is one thing, what the sentence means is another. That a connective per se is not appealed to in verifying a sentence does not mean that what is verified does not in some sense contain the connective, or, more precisely, what the connective represents. Certainly, if 'fact' is used commonsensically that is so.

3. Wittgenstein's position is implicitly Kantian. Let me explain. The connectives have meaning. That much no one will deny. Their meaning must be grounded. If one denies that it is grounded in the world, one must ground it in mind. That is the point. That Wittgenstein does not ground it at all has something to do with his behaviorism. It is worth noticing that even those philosophers who prefer to speak of meaning in terms of use must ground the connectives. They
ask: What are the connectives used for? I answer, commonsensically, that they are used to describe the world. That they can and are so used is enough to reveal that they represent something.

'World' and 'mind' are troublesome words. In one use of 'world' everything is in the world, including mind. In another use only those things are in the world which are referred to by sentences which do not contain mental words such as 'imagining', 'thinking', and so forth. That is, thinking, remembering, imagining, etc. are not in the world. Only what is thought, remembered, etc. is. I merely notice that commonsensically one is often aware of a spot being not green or of a spot being both red and square. Moreover, many descriptions of what we see and feel abound with logical words. Later I shall attempt to exhibit the idealist's reason for banishing connectives. Here I wish to point to another motive for banishing them. Some philosophers in their anxiety to secure an ontological foothold for mind have believed that the denial that logic is in the world proves that minds exist. As far as I am concerned, no such arguments are needed. Sometimes I am aware of remembering a state of affairs, just as I am sometimes aware of a state of affairs.

Let me now turn to those passages in which Wittgenstein boldly faces the issue.
3.333 A function cannot be its own argument, because the functional sign already contains the prototype of its own argument and it cannot contain itself. If, for example, we suppose that the function $F(fx)$ could be its own argument, then there would be a proposition $'F(F(fx))'$, and in this the outer function $F$ and the inner function $F$ must have different meanings; for the inner has the form $(fx)$, the outer the form $'(fx)$. Common to both functions is only the letter 'F', which by itself signifies nothing.

3.334 ... The rules of logical syntax must follow of themselves, if we only know how every single sign signifies.

5.47 ...all logical operations {connectives} are already contained in (my italics) the elementary propositions. For 'f(a)' says the same thing as 

$'(∃x)f(x) \cdot x = a'.$

Where there is composition, there is argument and function, and where there are, all logical constants already are.

5.515 ...the symbols 'p' and 'q' presuppose 'v', '−', etc.

3.333 and 3.334 pertain to the formation rules of atomic sentences. Those rules are closely related to the theory of types. Wittgenstein believes that those rules are in some sense a consequence of the type distinction. That is why he fails to acknowledge the ontological relation of exemplification, the "glue" which holds an individual and a character together in a fact. This mistake has a further consequence. It pushes him towards nominalism. That topic I shall discuss in the following chapter.

What is the type rule and how is it related to the formation rules of the language? Two things must be clearly
distinguished. First, in constructing a formalism, one begins by distinguishing signs according to shape (type). Second, the formation rules specify what shapes can be combined in a well-formed string. These rules are not a consequence of those distinctions. There is nothing about the former which can be in any sense interpreted as prohibiting, say, 'ff' from being a well-formed string. That this string is in fact excluded depends on a formation rule. This shows that there is a relation obtaining amongst the things into which the language is interpreted. The relation is that of exemplification and is such that only things of different kinds can stand in it.

Wittgenstein's mistake stems from his employing 'fx' as the type sign. Accordingly, he believes that the type distinction entails the formation rules. However, this belief is plausible because, unnecessarily and misleadingly, he uses the formation rule in stating the type distinction. That means if anything, that we could not distinguish amongst the signs without stipulating formation rules. Clearly this is false. The mistake prompts him to argue that an atomic fact consists only of things and does not contain exemplification. Again, that is because exemplification, or, more accurately, the formation rule which represents it, has already been smuggled into the type. It is worth remarking
that many philosophers speak of a predicate term as 'is blue' or 'is red'. Their mistake is similar. They fail to appreciate exemplification. As I said earlier, this mistake creates a dangerous slope toward nominalism. Wittgenstein, for example, sometimes speaks of a predicate sign as a \textit{form}. That provides a most seductive bridge to nominalism, for \textit{form} is frequently claimed to be nothing.

5.47 and 5.515 are Wittgenstein's crude attempts to ground the meaning of the connectives. I say crude because what he says strikes me as sheer nonsense, amounting to no more than an evasion. To say that the connectives are already contained in the atomic sentences sounds similar to saying that the formation rule for atomic sentences is already contained in the type distinction. However, in the latter case one can at least produce a reasonable account of how he may have been misled by the propositional-function notation. In the former case, I cannot think of any such account. The only possible one is that 'composition' was his undoing. He may have believed that composition was just that, no matter what was composed of what. I, for one, believe that the best one can do to explain Wittgenstein's absurdity on this point is to recall (a) his denial of logical objects and (b) his preoccupation with atomic facts. Even so, he felt the need to say something on the matter. That is why 5.44 and 5.515
are there. Unfortunately, they say nothing.

At this point it might be advisable to rehearse my own line of argument regarding the ontological status of logic. Consider the lower functional calculus, supplemented by descriptive signs. Interpret it. The interpretation of the descriptive signs is not problematic. The interpretation of the logical ones is, or so it has been claimed. I reject the claim. The logical signs of the formalism are interpreted into the logical words of ordinary language which, since they are used without philosophical perplexity in describing our world, represent something. To me that is obvious. Nevertheless, many philosophers have been reluctant to grant logic an ontological home. Some causes of the reluctance we have just examined. The most prominent are: (a) the truth tables appear to do away with the connectives, i.e., they appear to define them, and (b) some philosophers fear that by admitting that logic is ontologically rooted they may be compelled to deny the categorial difference between logical and descriptive objects. (b) is easily countered. For example, the two kinds of signs are distinguishable syntactically. Moreover, no one who is the least bit familiar with the tradition would grant logic an ontological home without carefully isolating it as a special realm of existence. (a) is more difficult to deal with. However, as I suggested, if one uses 'fact' com-
monsensically, then one will see that the truth tables merely stipulate the conditions for certain sentences being true, i.e., for certain facts being the case, in exactly the same way that the picture theory does the same thing for atomic sentences. The truth tables neither define nor explicate the connectives. In particular, they specify the conditions under which the logical relations they represent obtain.

I now turn to an analysis of what I believe to be one of the deepest sources of the reluctance to grant logic ontological status. **Awareness is propositional.** That proposition I would defend to the last. Here I shall not. I shall merely explain it. It means that we are always aware of facts. Or, to say the same thing linguistically, in order to refer to the object of awareness (the intention) one must employ a sentence. A word, say, 'green' will not do. One objection to that view runs as follows. "Are not such sentences as 'I see a chair' perfectly legitimate? And, is not the object of awareness in this case a thing, not a fact?" I would answer as follows. No one will deny that what was said could also be expressed by 'this is a chair'. The question is merely why on structural grounds, if I may so express myself, the second sentence is preferable to the first. To grasp that, suppose that I wanted to say **what** I am seeing, rather than **that** I am seeing it. In this case I would say 'this is
a chair'; and merely elliptically, perhaps with a pointing gesture, 'chair'. It follows that for one, who, like all nonidealists, insists on the distinction between an act and its content as fundamental, the second sentence is structurally preferable.

There is indeed a further connection between certain idealistic tenets and the failure to recognize that all awareness is propositional. One may, and does, without linguistic awkwardness say that one sees "this being to the left of that." Once granted that such a fact is sometimes presented to us, one will not and need not hesitate to grant that its ingredients, including its relational ingredient, in this case, to-the-leftness, which, since the fact as a whole is presented to us (see), is in some sense also presented to us. On the other hand, it is, and not only linguistically, awkward to say "I see to-the-left-of-(ness)."

A good deal of idealism stems in fact from construing sensation on a nonpropositional model. 'Esse est percipi' has its roots in just such a model. Furthermore, sensation is often thought to be the only source of acquaintance with the world. If both these doctrines are embraced, then no relations, whether descriptive or logical, can possibly be in the world. For, one employing such a model would never think of saying that one sees (senses) to-the-left-of, say.
That is the point. Logic, which is relational through and through, cannot be in the world on such an account. It must be contributed by mind. And, of course, the tradition is rich with just such views.

Wittgenstein explicitly accepts the view that awareness is propositional (cf. 2.013). Yet, oddly enough, when he casts about for an argument against connectives (5.461) he implicitly appeals to a nonpropositional model of awareness, arguing in effect that one does not see conjunction. Of course one does not. Neither does one see red, or to-the-left-of. One sees something which is red or one thing being to the left of another. So, too, one does not see conjunction. One sees, for instance, that Russell is tall and thin. I, for one, am convinced that if it is once realized that awareness is propositional then the ontological status of logic would not be so begrudgingly granted, if it is granted at all. Nor would distinguishing between sensing and knowing affect matters. We often do see that something is not red or that something is both red and round. One reservation, however, does come to mind. No one would wish to say that one sees (in the sense of perceives) that $x$ is red or square. I merely notice that since everything can be said using only negation and conjunction, the reservation is not a serious one. On the other hand, the disjunctive facts have been
subjected to the severest attacks. The example shows why that is so. However, it does not show what most critics thought it showed, namely, that logic is not in the world.

In conclusion, I want to remark that I have paid little attention to the difference between the connectives and the other logical signs; the operators and the geometrical relation between the signs which represents exemplification. For my purposes that was unnecessary. Of course, in a total explication of 'logical form' they cannot be ignored. But the main point I have tried to make is already secure. I have shown how a language containing logical signs succeeds in describing our world. To see that is to see logical objects.
Chapter VI

NOMINALIST OR REALIST?

In the two preceding chapters Wittgenstein's picture theory of language was subjected to a critical exposition. Both criticism and exposition were based on a realist model. That is, 'f₁' and 'a' were construed as undefined signs (names), each of a different type (shape), each standing for a different kind (ontological), namely, a character (universal) and an individual (particular), respectively. Furthermore, the juxtaposition obtaining between 'f₁' and 'a' in 'f₁a' was held to represent exemplification, the (ontological) nexus relating the individual and the character. To use a realist model in analyzing the picture theory may seem problematic. It may lead one to think that I have prejudged Wittgenstein's stand on the nominalism-realism issue; or, perhaps more seriously, it may lead one to question the analysis itself, since whether he is a nominalist or a realist is itself controversial. Indeed, two recent commentators, Anscombe and Cope, find the Tractatus nominalistic. In this chapter I propose to do two things. First, I shall show that the picture theory and the nominalism-realism issue are dialectically distinct in the Tractatus. Second, I shall contest
the claim that it is nominalistic.

The chapter is composed of four sections. (I) I shall briefly examine the realism-nominalism issue, paying careful attention to the various forms each position takes. (II) I shall show that the analysis of the picture theory stands on its own feet in the sense that one could espouse Wittgenstein's picture theory and yet not commit oneself to either nominalism or realism. (III) I shall offer a detailed criticism of Anscombe's claim that the *Tractatus* is nominalistic. (IV) I shall defend the claim that it is realistic. As one might expect, that defense will be cautious. I shall argue that, though confused and undecided, Wittgenstein is, however reluctantly, a realist. Naturally, I shall try to explain the reluctance. Oddly enough, one aspect of that explanation will depend on bringing out in what sense the picture theory does influence his choice of existents. That there is some connection between the picture theory and his choice of existents shows how subtle the matter is. Notice that I am prepared to argue, on the one hand, that the picture theory does not lead him to nominalism and, on the other, that it does influence his choice of existents. The point is this. The influence is not categorical, i.e., it does not oblige him to deny an ontological kind. It merely forces him to reject certain entities.
The focal point of the nominalism-realism controversy is the question: Do universals exist? The realist answers affirmatively; the nominalist, negatively. The italicized words mark the problem. Since both are used philosophically, they require explication. Their explications are as follows. An existent is the referent of an undefined sign of the ideal language. An individual is the referent of an undefined sign of the zero-type. A universal is the referent of an undefined sign of any higher type. Accordingly, a realist maintains that the ideal language contains undefined signs of at least two different types; a nominalist, that it contains undefined signs of the zero-type only. These explications are purely syntactical. The clarification gained by means of them is thus limited. Let us see why.

The realist maintains that 'f₁a' (assuming that it is both true and atomic) refers to a fact the constituents of which are existents. These existents, a character (referred to by 'f₁') and an individual (referred to by 'a'), are "tied" by the nexus of exemplification, represented by the juxtaposition of 'f₁' and 'a' in 'f₁a'. Accordingly, in what the realist believes to be the ideal language 'f₁a' could serve as the transcription of 'This is green', asserted, if one chooses to assert it, of a green spot in one's visual
field. The italicized phrase points to a difficulty which is irrelevant to the present issue. I merely notice it in order to brush it aside.

For the realist to say that a green spot in a visual field consists of two entities, an individual and a character, and an ontological nexus, exemplification, may strike one as peculiar. Certainly it strikes the nominalist as peculiar. Much of the peculiarity stems from 'two' and its counting and pointing connotations. That is, it appears that the individual and the character are two in the same way in which, say, two green spots are two. In the latter case, 'two' carries a spatial connotation, i.e., the two spots can be counted by pointing. In the former case that is not so. Thus, 'this is green' refers to some sort of unity. Its constituents are not seen as separate entities, if I may so express myself. They are, however, so seen in the sense that in referring to a spot in the visual field one uses a sentence which contains 'is'. That use of 'is' is neither that of identity nor that of part-whole. That is why the realist says what he does; namely, that there are two entities which one sees in seeing a green spot. One who grasps all that is likely to recall the discussion in the preceding chapter of 'awareness is propositional'. The immediate point, however, is that the realist's individuals are rather strange. One need only re-
call how the tradition spoke about them to appreciate their strangeness. They are "bare," "momentary," and "wholly contained in a specious present." Though bare, they are seen. That is the rub. Such entities have found little favor.

The importance of the foregoing discussion is that it points to the peculiarity of the realist's individuals and to the fact that it is they which are at the center of the nominalist's discomfort. Hence, though the only undefined signs of the nominalist's ideal language are of the zero-type, they do not refer to individuals which can by any stretch of the imagination be construed as the realist's are. No nominalist ever claimed that his individuals were bare; entities which if "divorced" from all characters, all properties, are "diaphonous," to appropriate Moore's term. Yet, both Anscombe and Copi claim that Wittgenstein's only existents are just such entities. That is puzzling. Of course, it does not make what they say wrong. It merely makes one suspicious.

What are the referents of the nominalist's zero-type signs, the only undefined signs in his ideal language? Before answering that question it might be well to emphasize that the nominalist is more or less untroubled by the realist's characters. That is, the nominalist and the realist agree that a spot in the visual field "has" a quality. The
problem is: Does it "have" an individual too, or is the spot itself merely an individual and not, as the realist claims, a fact? To repeat, the nominalist's dismay is about the bare and diaphonous individuals which the realist claims to see.

As 'nominalist' has been used, there are two kinds of nominalists. For convenience I shall refer to them as A and B. A argues that the green spot is itself an individual. Accordingly, his analysis of 'this is green' runs as follows. 'This' refers to the spot properly and arbitrarily: 'green', commonly and nonarbitrarily. The 'is' remains unexplained, much as the informing nexus remains unexplained in the hylo-morphic scheme. The comparison is intentional. The proper-common name doctrine has its structural roots in the hylo-morphic scheme. The significant point, however, is that on the proper-common name analysis, the common name cannot refer arbitrarily. For, two green spots must both be referred to by 'green'. Or, to put the matter broadly, the use of the same common name is grounded in the spots. On the other hand, one can use any two words (provided only that they are different) to refer properly to the two spots. That 'green' cannot be applied arbitrarily to two green spots reveals the weak point in A's analysis. Subtleties apart, A's individuals turn out to be complex. Thus, A is not unlike the
realist except that he has, among others, the disadvantage of leaving obscure the nexus between the parts of his complex entity. In another place I have pursued the motives behind A's gambit. Very briefly, that gambit is motivated by his unfounded fear that the realist's acceptance of universals commits him to Platonism which for the purposes at hand may be defined as follows. The Platonist claims that a universal is needed "over and beyond" the various exemplifications of it. Ironically, the Platonist merely responds to the difficulties engendered by the nominalist. For, the Platonist begins with the nominalist's individuals. Thus, he posits universals to account for the fact that some individuals are literally the same, i.e., referred to by the same word. What both A and the Platonist fail to appreciate is the notion of independence, a submerged though substantial part of the dialectics of existence.

B takes a quite different tack. He argues that our green spot is not a fact composed of different kinds of things, but a "fact" composed of the same kinds of things; specifically, the realist's universals (characters). B, therefore, rejects the realist's individuals out of hand, maintaining in effect that an individual is a "collection" (class) of characters. The zero-type, undefined signs of B's ideal language refer to precisely the same sort of things as
the realist's undefined signs of the first-type. B's difficulties are encountered when he tries to handle the problem of individuation, i.e., "thisness." Notice that B's problem, which is to account for difference, is just the opposite of A's, which is to account for sameness.

Traditionally, B has handled the problem of individuation in one of two ways. He has implicitly or explicitly appealed either to the doctrine of absolute time or to the doctrine that each collection has a unique member. The former amounts, except for terminological differences, to a doctrine of bare particulars. The latter amounts to a doctrine of internal relations which brings one to the threshold of idealism.

Thus far I have merely sketched the dialectics of the realism-nominalism controversy. The purpose was to show that the two kinds of nominalists, A and B, are quite different. That they are different shows that the clarification achieved by a purely syntactical explication of 'nominalism' and 'realism' is limited. To say that a philosopher is a (syntactical) nominalist is not to say that he accepts the realist's individuals while denying his characters. The converse is more likely to be the case.

What has all this to do with Wittgenstein? Clearly, if one is to argue about Wittgenstein's stand on the realism-
nominalism issue one had better know what evidence is to count for what. For instance, though there is some strong evidence that the author of the *Tractatus* is a syntactical nominalist, there is precious little that his existents are the same as the realist's individuals. Hence, since both Anscombe and Copi claim that his simples (objects) are the same as the realist's individuals, it is worth examining whether or not they arrive at their view by inferring it from his alleged syntactical nominalism. That, as I have shown, would be a blunder. To put the point a bit captiously, there is nothing whatsoever incompatible about propounding (syntactical) nominalism and accepting the existence of universals.

Anscombe herself attempts to characterize the nominalism-realism controversy. Her characterization is worth examining, for, among other things, it blinds her to what Wittgenstein is about. She maintains that "the problem of 'universals' can...be given this form: was Frege right to introduce two wholly different kinds of 'reference' /referents/ for words, namely 'objects' and 'concepts'? A 'concept' was the 'reference' of a predicate; now the characteristic mark of a predicate is its possession of an argument-place or -places, which could be filled with names of now one, now another object, hence a 'concept' is a 'universal'. In Witt-
genstein's fully analyzed propositions, we have nothing but a set of argument places filled with the names of objects; there remains no kind of expression that could be regarded as standing for a concept.\(^4\)

It is, I think, quite evident that in this passage Anscombe offers us a syntactical explication of 'nominalism' and 'realism'. Notice that she concludes from the alleged fact that Wittgenstein denies that the ideal language contains Fregean function signs that he denies that there are concepts (universals) in the world. Her own example of a concept is red.\(^5\) Accordingly, she commits the very blunder against which I just warned. However, possibly of greater significance is her syntactical criterion itself. It is drawn from Frege. Frege's candidate for the ideal language contains two kinds of descriptive signs, functions and names. \(f_1x\) is an example of the former; \(a\), of the latter. Anscombe mistakenly believes that one must subscribe to the former in order to be a realist. That she is mistaken is easily seen from the fact that in speaking about realism I did not even mention functions. Indeed the propositional-function notation is itself in need of clarification. It has been the source of endless confusion and has even proved to be a temptation for nominalism.\(^6\) The immediate point, however, is that the realist I characterized is not a realist upon
her explication. That alone shows it to be amiss. Furthermore, her criterion is bound to cause one to overlook some of the subtleties. For example, the realist I characterized could say everything about his elementary propositions that Wittgenstein does, e.g., that they are a "concatenation of names." For, undefined signs of both types are names. Neither is a function. Thus, even to say that Wittgenstein is a nominalist because his ideal language does not contain Fregean functions may be mistaken. In fact, there are grounds for believing that it is.

According to Frege, concepts are incomplete (unsaturated); objects, complete (saturated). That distinction is accurately reflected by the syntactical distinction between functions and names, which refer to concepts and objects, respectively. Wittgenstein rejects Frege's distinction, maintaining instead that every sign is incomplete in the sense that each must occur in a sentence in order to have meaning (cf. 3.3). Or, to say the same thing differently, only sentences (facts) are complete (saturated) according to Wittgenstein. Structurally speaking, Wittgenstein, having abolished what he believed to be the most sacrosanct distinction between objects and concepts, might well have been led to call both objects. He failed to realize that, even though the difference Frege believed important is no difference,
there are, nevertheless, differences between individuals and characters. The type distinction between the signs referring to them reflects but one. Unfortunately, Wittgenstein did not appreciate even that one, for he was not fully clear about the type distinction. Nor was he fully clear about functions. But of that later. Here I merely wish to repeat that Anscombe, on the one hand, offers us a confused and misleading criterion for distinguishing between nominalist and realist, and, on the other, commits a serious blunder by inferring from Wittgenstein's alleged syntactical nominalism his denial of universals.

At one point (6.3751) Wittgenstein does deny that 'red' is undefined. Anscombe seems to overlook this apparent point in her favor in arguing that Wittgenstein denies existence to universals. I say apparent because the real question is: Does the denial that 'red' is a linguistic simple amount to a denial of realism? The answer is No. Let me explain.

As we ordinarily use 'red', it refers to distinguishable shades. The fact has caused numerous confusions. One is germane. The shades of red are sometimes called "particular" shades of red. Thus, regarding the ordinary use of 'red' and other such words, there is an implicit proper-common name doctrine. The significant question is whether
or not a particular shade of red is a particular (i.e., individual). Some philosophers have believed so. They have been confirmed in this belief by the thought that it rids them of universals. To see that this is not so, one need merely consider two spots of the same "particular" shade. The problem of universals is upon us again. All the gambits have full range here. Hence, the common-proper name doctrine which is implicit in the ordinary use of color words, pertains only to universals. Or, to put the point otherwise, the fact that 'red' as ordinarily used also refers to particular shades of red has nothing to do with the realism-nominalism issue. The later Wittgenstein believed that it did. His family-resemblance doctrine which is merely a fancy name for the common name doctrine is purported to dissolve the realism-nominalism controversy. It does not. That I have shown. However, Wittgenstein's denial that 'red' is a linguistic simple has a deeper source. It is motivated by his wish to make 'This is red and this is green' analytic. He hoped to secure that by defining color words. Thus, his denial (6.3751) has in fact nothing to do with the realism-nominalism issue. Only in his later phase did that issue make its entrance.
Does my analysis of the picture theory stand or fall depending on whether Wittgenstein is a realist or nominalist? That is the question I hope to answer; or, more accurately, I hope to defend the negative answer affirmed above. It will be prudent to begin by summarizing the analysis of the picture theory offered in Chapter IV. Naturally, for present purposes only atomic sentences are relevant.

It was shown how Wittgenstein, failing to distinguish the ordinary uses of 'picture' and their associations, might have been led to maintain that language and what it represents share something, namely, logical form. That analysis which has considerable structural and historical plausibility in its own right, gained further plausibility upon examining Wittgenstein's views on analyticity. Very briefly, he believes that neither the logically necessary nor the logically impossible can be represented in the language; or, if you will, the sentences expressing both are in some sense ill-formed. That belief in turn leads him to claim that the ideal language contains only synthetic sentences. The artificiality of that claim need not concern us here. It is enough to notice that he is driven to it by the following "argument." (i) One cannot spatially represent a spatial impossibility. (ii) Therefore, one cannot logically (linguisti-
ally) represent a logical impossibility. The suppressed premise necessary to make the argument valid is that both spatial and linguistic representations of fact are pictures in the same sense of 'picture'. To repeat, that premise is mistaken. The mistake is that of arguing from the fact that language and, say, drawings have some picturing features in common to the "fact" that they have all picturing features in common. Thus, since a spatial picture and what it represents share, quite literally, a spatial relation, Wittgenstein infers that language and what it "pictures" share, quite literally, logical form.

That much of my analysis, the bulk of it I should say, is patently independent of whether Wittgenstein is a nominalist or a realist. It merely reveals how he comes to believe that language and the world share logical form. It has nothing whatsoever to do with the syntactical character of his ideal language. He would say the same thing no matter what the syntax of his ideal language was. Moreover, the analysis reveals that the picture theory springs from considerations which are unrelated to those which prompt one to opt for either nominalism or realism. On the other hand, and this is the topic of present concern, it may be that the picture theory itself prompts one to opt for one or the other. I do not believe that it does. That I shall show. I shall also show that neither nominalism nor realism makes the (unexpli-
cated) doctrine of shared logical form any more plausible. In showing it I shall thereby show that my criticism of the picture theory, though based on realism, is to the point. In fact, speaking boldly, the (unexplicated) doctrine of shared form makes no sense. It is philosophical. Furthermore, it can, as far as I can see, be explicated only by speaking about the syntactical form of a sentence referring to a fact. Hence, since the syntactical form of a sentence, no matter to which artificial language it belongs, is essentially geometrical, one who wishes to secure an (explicated) doctrine that language and the world share something would have to maintain that language is essentially spatial. No one is prepared to espouse that doctrine.

'The logical form of a fact' is philosophical. Speaking in the most general terms, its explication is that the form of a fact is the syntactical form of the sentence expressing it. Consider again 'f₁a'. Its syntactical form is that a sign of the f shape and a sign of the x shape are juxtaposed. Of course, since f-shaped signs and x-shaped signs refer to characters and individuals, respectively, and juxtaposition represents exemplification, one might say that the form of the fact f₁a is that it consists of a character, an individual, and exemplification. This formulation is derivative, though. It is only verbally distinct from the former. For,
universality, individuality, and exemplification, which are the logical constituents of the fact, are themselves explicated by talking about the syntactical features of the language, in particular, about the formation rules. As we saw in Chapter IV, upon this explication of 'logical form' the sentence as a fact and the fact it expresses cannot have the same form. For, the sentences which refer to those facts have different syntactical forms.

There is still another use of 'logical form' which may appear distinct from the use just explicated. When it is said that a sentence and the fact it expresses share logical form, the intention is to express the idea that the sentence expresses or represents a possibility. The two uses of 'possibility' are relevant, one applying to the world; the other, to the language. The latter may be called linguistic possibility; the former, logical possibility. Linguistic possibility is explicated in terms of formation rules; logical possibility, in terms of the truth tables. Wittgenstein did not always appreciate the difference. His failure to do so is explained, once again, by the fact that, misguided by the picture metaphor, he wished to argue that what is possible in the language and what is possible in the world are indistinguishably the same, i.e., that every well-formed sentence is synthetic. Be that as it may, when 'logi-
cal form' and 'possibility' are used synonomously by Wittgenstein, he has in mind the formation rules. Thus, this use of 'logical form' is no different from the use explicated in the preceding paragraph. The formation rules are all based on the shapes of the signs and the geometrical relations amongst them in a string.

My criticism, then, though cast in a realistic mould, is very broad. It strikes directly at the philosophical notion that a fact can be spoken of as having a logical form. Such talk can mean only that the sentence expressing the fact has a certain syntactical form. Accordingly, I do not think that it matters whether or not Wittgenstein's candidate for the ideal language is realistic. In principle the criticism would be the same. To grasp that consider what the situation would be if Wittgenstein did in fact espouse syntactical nominalism. An elementary sentence would consist of a definite arrangement of signs of the same type. The rules for arranging them in sentences would be based on geometrical relations. Hence, the only thing that the sentence as a fact and the fact it expresses could intelligibly be said to share would be a spatial relation(s). Again, language would have to be held to be essentially spatial in the sense that the spatial arrangement of the signs represents the spatial arrangement of the things they stand for. There is, as far
as I can see, no evidence whatsoever for believing that Wittgenstein was willing to maintain that the ideal language is essentially spatial. Indeed, Wittgenstein implicitly rejects the idea that language is essentially spatial (cf. 2.181 - 2.202). Anscombe seems aware of all this. Yet, she seems unaware that as far as the doctrine of shared logical form is concerned it makes no difference whether Wittgenstein is a nominalist or realist. The reason is, I submit, that she never attempts to get behind the notion of logical form.

The last question which I must answer in this section is whether there is any reason to believe that, though neither realism nor nominalism makes the (unexplicated) doctrine of shared form any more plausible, the picture theory suggests, prima facie, syntactical nominalism. I can think of none, though as I indicated above, one might be inclined to think so if the (unexplicated) logical form of the fact is identified with the spatial arrangement of its constituents. That might prompt one to opt for nominalism for the simple reason that no one would ever wish to argue that the relation in which an individual and a character (of the realist's sort) stand is a spatial one. That is the point. However, no philosopher including Wittgenstein ever suffered such a naive attitude. Thus, as far as I can see, the picture theory suggests neither nominalism nor realism.
Probably the most important thing to remember is that Wittgenstein in the *Tractatus* does no more than "postulate" that language and the world *share logical form*. He never indicates what logical form is except in those passages where he speaks rather vaguely about how the signs are combined, i.e., about the syntax of language. To be sure, he maintains that it is *ineffable*. Yet, in the *Tractatus* he expresses many things that are alleged to be ineffable. The point is that what is ineffable is what can only be said *about* the ideal language and not *in* it. Thus, though one might say that logical form is ineffable that fact does not account for his silence on the topic. His silence, I submit, is due to his own inability to say what it is. *Logical form* remained for him a phrase for pointing to an "I-know-not-what" which he believed incorrectly must be literally shared by language and the world in order for the former to be *about* the latter.

I do not want to claim that either Copi or Anscombe are guilty of inferring Wittgenstein's alleged nominalism from his picture theory. I do not know whether they do. My point is merely that such an inference would be mistaken. On the other hand, I do not want to claim that they do not infer the one from the other. Again, I do not know. However, neither of them seriously comes to grips with the doctrine of shared logical form. That failure could easily be responsible for others.
The author of the *Tractatus* is a nominalist. That is Anscombe’s claim. Her defence of it, regardless of whether or not it is defensible, is unsatisfactory. For instance, she frequently draws support for it from passages that are, to appropriate her phrase, "wildly irrelevant." She fails, as we saw, to distinguish between syntactical and nonsyntactical nominalism. An obvious consequence of this failure is that she counts evidence for the former as evidence for the latter. Nor are those her only failings. Two others are noteworthy. One. She makes, as far as I can tell, no attempt to secure her interpretation structurally. For instance, she completely disregards the 1929 paper, a document which completely undermines her interpretation. Two. She makes no effort to explain why Wittgenstein should have found plausible the kind of nominalism to which she commits him. Such neglect is disturbing, especially since the position she imputes to him is extremely baffling, to say the least. What precisely is her interpretation? Consider the following passages.

Wittgenstein does not speak of 'concepts' or 'universals' as a kind of thing to be found in the world; it is quite clear that for him there is nothing but objects in configuration.\(^9\)

What... has become of Frege's concepts in Wittgenstein's theory? They seem to have disappeared en-
tirely; actually, however, instead of making concepts or universals into a kind of objects, as Ramsey wished to, Wittgenstein made the gulf between concepts and objects much greater than Frege ever made it. So far as concerns the content of a functional expression, that will consist of the objects covered by it. But in respect of having argument places, concepts go over entirely into logical forms. In the 'completely analysed proposition'...the Fregean 'concept', the thing with the holes in it, has become simply the logical form. Thus there is no question of two kinds of referent for expressions; one which is incomplete, having a hole in it that awaits, say, an object to complete it; and another, complete and capable of completing the incomplete, itself requiring no completion. 10

A concept was the 'reference' of a predicate; now the characteristic mark of a predicate is its possession of an argument place or places...11

The essence of Anscombe's interpretation may be stated as follows. (1) She maintains that Wittgenstein is a syntactical nominalist. She bases that claim on two pieces of evidence. (a) According to Wittgenstein, an atomic fact is a "configuration of objects," not, as Frege might have said, a "configuration of objects and concepts." (b) In his ideal language there are no function signs. Functions are simply an ordering of signs referring to objects. (2) She maintains that 'red' and similar terms do not refer to objects. According to her they refer to configurations of objects and are represented syntactically by "logical forms."

I have already criticized (Sec. I) Anscombe's criterion for determining whether or not one is a syntactical nominalist.
That criticism bears repeating. The realist I characterized did not even mention propositional functions, i.e., function signs. For him there are simply undefined signs of at least two different types. Signs of both types are called names. Thus, our realist could say about his elementary propositions everything that Wittgenstein says about his, e.g., that they are "a concatenation of names." Moreover, our realist would be critical of Frege's function signs, arguing that they smuggle in the formation rules and, therefore, cause one to overlook the ontological nexus, exemplification. In essence, our realist is rejecting Frege's saturated-unsaturated distinction. As every reader, including Anscombe, of the Tractatus knows, Wittgenstein, too, rejects that distinction. According to him every expression is unsaturated, for no expression can occur alone, but only in a sentence. Wittgenstein, therefore, might be holding, though not explicitly of course, that all undefined descriptive signs are names regardless of what (ontological kinds) they name. Unfortunately, Wittgenstein fails to replace Frege's distinction between characters and individuals. Thus he calls both (ontological kinds) objects and believes that both are named by signs of the same type (shape).

Now none of the foregoing proves that Wittgenstein is a realist. It merely proves that more caution is required in
interpreting the Tractatus than Anscombe exerts. To fully appreciate her lack of caution consider the following passage in which she is attempting to establish the claim that all signs occurring in Wittgenstein's elementary propositions are of the same type.

...if /the elementary proposition/ is just a concatenation of names—then it is not reproduced, even if it can be faithfully represented, by a formula consisting of some letters for names and some letters for functions. And this is borne out by many passages. Notably for example 3.1431: The nature of the propositional signs becomes very clear, if we imagine it as composed of three-dimensional objects (say tables, chairs, books) instead of written signs.12

3.1431 is one of those wildly irrelevant passages I alluded to above. It demonstrates absolutely nothing regarding the syntactical character of Wittgenstein's atomic sentences; the point of the passage is to get one to appreciate that a sentence is not a name. A sentence is an arrangement of names, i.e., names arranged in a definite way, according to a rule. Or, to make the point as Wittgenstein does, a sentence is articulate, a fact. That Wittgenstein in order to dramatise the point employs a metaphor which replaces the written signs by physical objects which in one sense are the same kinds of things, viz., physical objects, does not mean that all the signs are of the same syntactical kind. Had Anscombe paid attention to 3.143 she could not have missed the point of the passage. For there he emphatically
shows his concern to be with how Frege came to call a propositional sign a name. Incidentally, 3.1432, that infamous passage in which Wittgenstein states that relational signs are not to occur in the ideal language, whatever else may be inferred from it, stands just at this place to make the same point, namely that a sentence is not a name, not a complex sign. 3.1432 has been seriously overestimated. But of that later.

There are, of course, passages which do support Anscombe's claim that Wittgenstein is a syntactical nominalist. Unfortunately, 3.1431 is not one of them. The following are:

2.01 An atomic fact is a combination of objects (entities, things).

4.1272 ...the variable name 'x' is the proper sign of the pseudo-concept object...

4.22 The elementary proposition consists of names. It is a connexion, a concatenation, of names.

4.24 The names are the simple symbols, I indicate them by single letters (x,y,z).

The elementary proposition I write as function of the names, in the form 'fx', 'Φ(x,y)', etc.

Those passages cannot be dismissed as wildly irrelevant. They are as good evidence for Anscombe's claim as one can produce. Eventually I shall offer some explanation of them. For the moment I merely notice that they offer no evidence for denying that, say, color words are names for objects. Anscombe believes that it does, for implicitly she thinks that Witt-
genstein's objects are the same as Frege's saturated entities. Her belief rests on her assumption that Wittgenstein uses 'object' in a strict Fregian sense. To appreciate how widely 'object' is used in the Tractatus consider these passages.

4.123 A property is internal if it is unthinkable that its object does not possess it. (This blue colour and that stand in the internal relation of brighter and darker eo ipso. It is unthinkable that these two objects should not stand in this relation.) (Here to the shifting use of words 'property' and 'relation' there corresponds the shifting use of the word 'object'.)

5.44 Truth-functions are not material functions. ... The proposition '—p' does not treat of denial as an object, but the possibility of denial is already prejudged in affirmation.

The import of both passages is hard to assess. However, it seems rather evident that in 5.44 Wittgenstein thinks of a material function as "treating of" an object. As I read it, that means, not that a function is of an object but, rather, that the function sign itself refers to an object. That view is re-enforced by 5.5261 to which I shall attend later.

4.123 is very opaque. With regard to it I only wish to suggest that there is no indication that Wittgenstein wishes to deny that 'this blue colour' (and notice the 'this') refers to a thing, an object.

There are no function signs in Wittgenstein's ideal lan-
guage. That is a crucial part of Anscombe's claim. Let us examine it. Consider the following passages:

3.318 I conceive the proposition—like Frege and Russell—as a function of the expressions contained in it.

4.024 ... One understands it/the proposition/ if one understands its constituents parts.

3.327 The sign determines a logical form only together with its logical syntactical application.

3.332 No proposition can say anything about itself, because the propositional sign cannot be contained in itself. (that is the "whole theory of types").

3.333 A function cannot be its own argument, because the functional sign already contains the prototype of its own argument and it cannot contain itself.

3.334 ... The rules of logical syntax must follow of themselves, if we only know how every single sign signifies.

4.126 ... Formal concepts cannot, like proper concepts, be presented by a function. For their characteristics, the formal properties, are not expressed by the functions. The expression of a formal property is a feature of certain symbols. The mark that signifies the characteristics of a formal concept is, therefore, a characteristic feature of all symbols, whose meaning fall under the concept. The expression of the formal concept is therefore a propositional variable in which only this characteristic feature is constant.

4.127 The propositional variable signifies the formal concept, and its values signify the objects which fall under this concept.

3.315 If we change a constituent part of a proposition...
into a variable, there is a class of propositions which are the values of the resulting variable proposition. This class in general still depends on what, by arbitrary agreement, we mean by parts of that proposition. But if we change all those signs, whose meaning was arbitrarily determined, into variables, there always remains such a class. But this is now no longer dependent on any agreement; it depends only on the nature of the proposition. It corresponds to a logical form, to a logical prototype.

These passages reveal that Wittgenstein uses 'function' in two different ways. Unhappily, he is not always careful to distinguish them. Not surprisingly, the result is confusion.

The import of 3.318 is that what a sentence (referentially) means depends upon (is a function of) the meaning of its constituents. Thus, 3.318 and 4.024 are merely different ways of saying the same thing, namely, that the (referential) meaning of a sentence is not a thing, but a composite of things, in particular those things referred to by the constituents of the sentence. Implicitly, Wittgenstein is rejecting Fregean senses. That he believes to be aligned with Frege (3.318) in this endeavor dimply reveals his failure to understand Frege's use of 'function'. Of course, one might suggest that Wittgenstein is intentionally playing on 'function'. For he sees that Frege's functions contained the formation rules plus a reference to universals. That is, Frege's functions played a double role. Wittgenstein separates the
roles. 'Function' in 3.318 carries the notion of being well-formed. For, how the meanings of the signs yield the meaning of a sentence is shown by the formation rules. In contrast, 'function' in 5.44 (quoted previously) and 4.126 is a sign for the place at which a universal stands.

Notice that in 3.332 and 3.333 'function' is explicitly used to carry the notion of being well-formed. To say that "the whole theory of types" is that a proposition cannot contain itself makes no sense unless one thinks that a type is a sentence form. Thus, 'type', 'atomic form', and 'function' are sometimes used synonymously by Wittgenstein. In the "Notes" that is evident. Though not evident in the Tractatus it is at least discernible. Wittgenstein sometimes calls 'fx' a function, sometimes 'f_{x}'. The former is merely a sentence form; the latter, is a sentence form plus a descriptive sign.

The burden of 4.125 and 4.127 is to establish a distinction between proper and formal concepts. The former are expressed by functions; the latter, by features of the symbol. What does 'function' mean here? I submit that the following account goes to the heart of the matter. Consider 'Red is a property'. According to Wittgenstein, property is a formal concept. Thus, that a thing, say, red, is a property cannot be said, it can only be shown by the symbol for red having a characteristic mark which all symbols for properties have.
To grasp that consider 'This is red'. Its transcription might be 'f₁a'. On the other hand, that red is a property is not expressed by attributing a "property" to red, rather it is expressed by 'f₁', the sign for red, being an f-shaped sign. Upon this interpretation, red is a proper concept which "falls under" the formal concept property. Thus, red is called an object (cf. 4.127).

The opposite interpretation of 4.126 and 4.127, the one which would favor Anscombe, is that 'f₁x' is the formal concept. Thus, the objects which fall under it are individuals and not universals. That interpretation is unsatisfactory, for it fails to provide a meaning for 'proper concept'. In this connection note that in 3.315 a "logical form" is a string of variables. That alone shows that Anscombe's claim that "concepts go over into logical forms" is absurd. For, every concept would have to be of a different form. How, then could one express (show) that two things fall under the same formal concept?

At this juncture I wish to re-examine 4.24. Wittgenstein says, or at least implies, that all names in an atomic proposition are of the same type. This offers substantial support for Anscombe's claim that Wittgenstein is a syntactical nominalist. Yet, we have just seen that Wittgenstein is willing to admit that what Frege called concepts are ob-
jects. The conflict is less serious than one might expect. I believe that Wittgenstein is quite prepared to accept both the realist's individuals and characters as existents. The reasons why he says that their signs are all names and suggests further that they all of the same type are many. Three will be sufficient for my point. (1) Having rejected Frege's distinction (saturated and unsaturated) between individuals and characters he does not believe that there is specifiable syntactical difference between the signs standing for each kind of object. For him, all objects are unsaturated. (ii) One prominent reason for distinguishing things into kinds through the type distinction is to define implicitly exemplification and, hence, to specify separately the formation rules. About that topic Wittgenstein knew nothing. He only knew that objects hang together in facts, not how they hang together. (iii) His characterization of the theory of types reveals his complete lack of understanding. He did not realize that types were shapes. He believed that types were sentence forms.

(i), (ii) and (iii) seem to provide an adequate explanation of why he thought all signs occurring in an elementary proposition were of the same type. One other reason would seem to clinch the point. Remember that all signs occur only in sentences for Wittgenstein. Therefore, every sign
is in some sense a function for him. About that he is clear (cf. 3.312). Everything is a concept. Everything is an object. The differences between the two preceding sentences makes no difference in Wittgenstein's ontology. However, since he gives the referents of all signs existence he merely calls them objects. Or, to put the point as I did before, he sees no way to distinguish syntactically the two kinds of things. Indeed by looking at the issue as I just did one gains a further insight into Ansoombe's confusion. She makes much of the fact that Wittgenstein says that atomic facts contain only objects. She concludes from that that he rejects concepts as existents. On the other hand, she realizes that Wittgenstein's objects are all unsaturated. She does not, however, conclude that Wittgenstein's atomic facts really consist of concepts. That conclusion is inescapable if one is going to interpret Wittgenstein from a purely Fregean point of view.

Anscombe offers one other argument for claiming that in a complete analysis, red, say, is a logical form. Consider the following passages:

2.023 This fixed form consists of the objects.

2.0231 The substance of the world can only determine a form and not any material properties. For these are first presented by the propositions--first formed by the configuration of the objects.

2.0233 Two objects of the same logical form are--apart from
their external properties—only differentiated from one another in that they are different.

2.024 Substance is what exists independently of what is the case.

2.025 It is form and content.

2.0251 Space, time and colour (colouredness) are forms of objects.

Anscombe's argument is contained in the following passage:

Red is a material property, and therefore formed by a configuration of objects—and, as I have said, by the same configuration of different objects in the different facts that exist when different things are red. These different objects, having the capacity to enter into configurations forming the material property red, will be of the same logical form: that of objects whose configurations yield colours. (Hence colour is a 'form of objects'; 2.0251)

Anscombe builds her argument on 2.0231 where Wittgenstein says that material properties are first formed by the proposition—first formed by the configuration of objects. Red is her example of a material property. Wittgenstein himself gives no example. She re-enforces her argument by appealing to 2.0251. Now I do not believe that that passage has anything whatsoever to do with the issue. Notice that Wittgenstein says that color, not a color, is a form of objects. And that color is a form of objects, not a configuration of objects. Anscombe, as far as I can see, merely exploits an ambiguity of 'form'. Wittgenstein uses that term in several ways. Two uses are relevant. First, a fact (sentence) has
a form (cf. 2.033). Second, an object (sign) has a form (cf. 2.025 and 3.327). In 2.0251 it is the second use of 'form' that is operative. Above I suggested how the formal concept "property" (which is a form of objects) might be represented. Let me now extend that analysis. Consider 'Red is a color'. According to Wittgenstein color is a formal concept, i.e., a form of some objects. Therefore, the sign which stands for, say, red, would have a characteristic mark which would express (show) that the sign stands for a color. That characteristic mark might be a subscript, say, 'c', which all signs that refer to colors would have. However, not only predicates have such syntactical marks which show the form of the object. Signs for particulars also have such marks. Implicitly, Wittgenstein divides the individuals on the basis of the senses (cf. 2.0131). That is, there would be visual individuals, auditory individuals, and so on. 2.0251, I submit, is to be read in that way.

What is the purpose of such a program? Two considerations motivate Wittgenstein. First, such a program is one way of securing elementarism. Second, the program is designed to secure the analyticity of such sentences as 'this is red and this is green' and 'This is red and this is c-sharp'. Wittgenstein believes that if predicates and individuals were classified in some such manner as suggested above,
then the analyticity of such statements as just instanced would show itself. Whether or not that is so, Wittgenstein's assertion that color is a form of objects may be put, somewhat barbarically, as follows. Some objects are "colorables", some are "colorers." He does not mean that a color is a configuration of objects, i.e., a configuration of individuals of the realist's sort.

What, then, of 2.0231? Does Wittgenstein really mean that colors are configurations of objects and not themselves objects? Does he mean that such a sentence as 'this is red' really expresses some sort of "configuration" of bare particulars? I hardly think so. In the next section I shall offer evidence drawn from other sources. Here I simply want to comment on the text itself, specifically, on 2.0231.

What Wittgenstein means is that a thing's being red is a configuration of objects. A thing's being red is a fact and it is the fact which is the configuration, not the red. However, nothing is red, nothing has properties, unless it and the property which it has are configured, so to speak. Neither properties nor objects stand alone according to Wittgenstein. Material properties are first given by the propositions in the sense that they are first given in facts and only propositions can express facts. That is the point of 2.0231.
Words such as 'configuration' and 'concatenation' are awkward terms which Wittgenstein employs in order to illuminate how objects hang together in a fact. He does use them with some consistency, though. For him, it is always the fact which is a configuration, never the property. Anscombe's failure to see, for example, that 'form' and 'configuration' are not always used synonymously caused her to misread 2.0251. Her failure to distinguish between a property and a fact caused her to misread 2.0231. For, according to her, a property would be a fact. Wittgenstein's point, however, is merely that there is no thing in the world which is not a member of some configuration. To appreciate that consider this passage.

3.221 Objects I can only name. Signs represent them. I can only speak about them. I cannot assert them. A proposition can only say how a thing is, not what it is.

I submit that Wittgenstein is here suggesting that one cannot say, for example, that red is red, nor red, nor that red is a color, nor that the thing which is red is a visual particular, etc. One can only say that some thing is red. Only in a proposition do signs have meaning (3.3). Thus, only in fact are objects what they are. There is no red, only red things. Conversely, there are no things, only things which have this or that property. That is precisely what Wittgenstein means in 2.012, 2.0122, and 2.013. Individuals
as well as properties occur only in facts. Thus, both are first given by the propositions. However, not only is the world composed of facts, objects in combinations, one can only think objects in combination (2.0122). One might say that the property is first given by the configuration and that it is we who separate it; we who assert that red is a color. However, if one is going to present a "picture" of the world, then one must present everything by propositions.

Put very briefly, my point is that 2.0231 is not to be read as Anscombe does, namely that a color is a configuration of bare particulars, but that a color is an object within the configuration and that objects occur only in configurations, are first given by the configuration. If the object (individual or character) is ever separated from the configuration, it is we who do it. Drawing on an historical similarity one could say that Wittgenstein is playing Aristotle to Frege's Plato.

Before turning to my own independent comments it will be well to summarize the findings of this section. Anscombe's interpretation is that Wittgenstein denies that there are undefined signs which refer to, say, colors. She supports that by arguing that he is a syntactical nominalist and by appealing to a scattering of passages which allegedly reinforce her thesis. 2.0251 and 2.0231 are here most perti-
nent citations. Those passages I rejected. However, I did admit that the *Tractatus* does offer some evidence that Wittgenstein is a syntactical nominalist. Yet, even those passages can be explained. In essence I accused Anscombe of being insensitive to the ambiguities of 'form' and 'function'. That insensitivity is part and parcel of her failure to come to grips with the doctrine of shared logical form. Had she come to grips with it I doubt that she would have said that Wittgenstein maintains that colors are logical forms.

IV

My independent comments on the *Tractatus* itself are few. In criticizing Anscombe most of the relevant passages were examined. My view is that Wittgenstein, though confused, is a realist. His syntactical nominalism, or, at least those passages which give him that appearance, are a symptom of that confusion. The important question is: What are the causes of his confusion? In this section I shall try to provide an answer. Or, more accurately, I shall try to add to the explanation offered above, namely, that Wittgenstein's denial of Frege's saturated-unsaturated distinction causes him to overlook the important differences between individuals and characters. First, however, I wish to exhibit four passages as evidence of Wittgenstein's realism:
A completely generalized proposition is like every other proposition composite. (This is shown by the fact that in \((Ex, \varnothing)(\varnothing, x)\) we must mention 'x' and '\(\varnothing\)' separately. Both stand independently in signifying relations to the world. As in the ungeneralized proposition.)

Properties and relations are objects too. Talking of a fact as a 'complex of objects' springs from this confusion (cf. Tractatus Logico-philosophicus). Supposing we asked: "How can one imagine what does not exist?" The answer seems to be: "If we do, we imagine the non-existent combinations of existing elements". A centaur doesn't exist, but a man's head and torso and arms and a horse's legs do exist. "But can't we imagine an object utterly different from any one which exists?" We should be inclined to answer: "No; the elements, individuals, must exist. If redness, roundness and sweetness did not exist, we could not imagine them."  

...he went on to say that if we are talking of 'individuals' in Russell's sense (and he actually here mentioned atoms as well as colours, as if they were 'individuals' in this sense)... These passages are emphatically realistic. Universals are accepted unconditionally as existents. The second and the last passage I find particularly fascinating. They rather lucidly express what I tried to express above by saying that the names in Wittgenstein's elementary propositions, though they may all be of the "same type," refer to both the characters and individuals "positted" by the realist. It is also worth noticing that the passages come from assorted periods, both before and after the Tractatus, of Wittgenstein's career. However, they still do not remove the confusion in
the Tractatus. On the other hand, they make it rather diffi-
cult to read the Tractatus as Anscombe does. Finally,
notice that 5.5261 runs completely counter to Anscombe's
interpretation. For, in saying that 'Ø' and 'x' stand inde­
pendently in signifying relations to the world there is no
doubt that Wittgenstein is willing to acknowledge two kinds
of existents. The only question that could remain is:
What kinds of things are they? To repeat, the Tractatus
does not provide a definite answer, for Wittgenstein does
not offer any examples, though, as we shall see presently, he
does offer examples of things that are not objects. Certain­
ly I do not think that Anscombe provides us with an answer.
Indeed her answer is not only inadequate, it is implausible.

The quoted passages, then bolster my claim that Wittgen­
stein is a realist. To support further my contention and to
uncover the causes of the confusions of the Tractatus I wish
to examine those passages in the "Notes" (pre-Tractatus) and
the "Remarks on Logical Form" (post-Tractatus) which have a
bearing on the question. After examining them, I shall re­
turn to the Tractatus itself, attempting a structural des­
cription of Wittgenstein's development.

Consider these passages from the "Notes."

...ordinary language conceals the structure of the
proposition: in it relations look like predicates,
and predicates like names, etc.19
Every proposition which says something indefinable about a thing is a subject-predicate proposition... Thus every proposition which contains only one name and one indefinable form is a subject predicate proposition... An indefinable symbol can only be a name, and therefore we can know, by the symbol of an atomic proposition, whether it is a subject-predicate proposition.

A proposition cannot occur in itself. This is the fundamental truth of the theory of types. In a proposition convert all indefinable into variables, there then remains a class of propositions which does not include all propositions, but does include an entire type.20

The "Notes" are nominalistic. That much is evident from the quoted passages. However, the nominalism is more rampant than even they indicate. Wittgenstein's commonplace book abounds with extentional thinking and imagery. For example, properties are thought of as classes of objects which are said to have them. This pattern, which may be found in both Frege and Russell, is a traditional one. What is interesting is that such a pattern requires qualified entities to be the referents of names. For, how else could an entity gain membership in a class?

Wittgenstein's use of 'form' and 'type' deserve special attention. Consider 'fx' and 'f\_1x'. The former is a type; the latter, a form. Forms, which are indefinable, are not explicitly denied existence. Only types are. However, by referring to predicates as forms Wittgenstein creates a dangerous slope towards nominalism. For, form is sometimes
held to be nothing. Furthermore, a type, in another meaning is a form for a sentence, that is, it is a formation rule. Thus, the confusions between the type distinction and the formation rules on the one hand, and between the several meanings of 'form' and 'function' on the other, both of which blemish the Tractatus, have their birth in the "Notes."

Now for one structural comment. The distinction between a form (Fregean function, e.g., \( f_1x \)) and a name (e.g., \( a \)) is Fregean. It is the syntactical image of the saturated-unsaturated distinction. In the Tractatus that distinction is abandoned. There Wittgenstein argues that all indefinables are forms or functions. For, he wishes to stress the idea that signs cannot occur alone; they only have meaning in a proposition. Accordingly, it would appear that the objects alluded to, though never specified, in the Tractatus embrace both individuals and characters. Or, to put the matter slightly differently, signs for both individuals and characters are names. Wittgenstein merely adds that they can occur only in propositions and, thus, are introduced as functions in the sense that their place in the syntax of the language is given with them. Anscombe, therefore, is correct in her claim that Fregean functions do not appear in the Tractatus. However, that is simply because every sign is a function and therefore every sign is a name. For, the
Fregean distinction has disappeared. In the *Tractatus* there are only names introduced contextually, i.e., in the sense that their introduction shows that they can occur only in a sentence, and types which are implicitly formation rules. The confusion in the *Tractatus* stems from Wittgenstein referring to both the formation rules and functions (i.e., those peculiar strings which are used to introduce names contextually) as functions. By failing to appreciate that confusion Anscombe can with some justification claim that Fregean concepts become logical forms in the *Tractatus*.

Consider these passages from the 1929 paper:

I only wish to point out the direction in which, I believe, the analysis of visual phenomena is to be looked for, and that in this analysis we meet with logical forms quite different from those which ordinary leads us to expect. The occurrence of numbers in the forms of atomic propositions is, in my opinion, not merely a feature of a special symbolism, but an essential and, consequently, unavoidable feature of the representation. And numbers will have to enter these forms when—as we should say in ordinary language—we are dealing with properties which admit of gradation, i.e., properties as the length of an interval, the pitch of a tone, the brightness or redness of a shade of colour, etc. It is a characteristic of these properties that one degree of them excludes any other. One shade of colour cannot simultaneously have two different degrees of brightness or redness...And the important point here is that these remarks do not express an experience but are in some sense tautologies...

One might think—and I thought so not long ago—that a statement expressing the degree of a quality could be analyzed into a product of single statements of quantity and a completing supplementary statement.
I maintain that the statement which attributes a degree to a quality cannot further be analyzed, and, moreover, that the relation of difference of degree is an internal relation and that it is therefore represented by an internal relation between the statements which attribute the different degrees.\textsuperscript{22}

These passages which are as blatantly realistic as those of the "Notes" are nominalistic and shed considerable light on Wittgenstein's involvement with both the analytic-synthetic issue and the realism-nominalism issue. Moreover, they reveal one rather deep structural connection between them. I, for one, am convinced that that connection is at the heart of his eventual rejection of the \textit{Tractatus}. But of that presently. Here I merely wish to point out that in 1929, at least, Wittgenstein was quite prepared to say that a statement attributing a degree to a quality cannot be further analyzed. That means, among other things, that the name of the quality is simple, i.e., that universals exist. I put the matter strongly, for, as I have shown, even if the quality is a specific shade of color, the difference makes no difference. However that may be, the 1929 paper would be a breathtaking advance over the \textit{Tractatus} if Anscombe's interpretation of the latter were correct. Actually the advance is not so breath taking, and her interpretation is in fact incorrect. Notice that Wittgenstein, obviously referring to the \textit{Tractatus}, says he used to think that a statement expressing the degree of a quality could be analyzed into a
product of single statements of quantity. Details apart, that means that even in the Tractatus he believed that qualities were named. It was not the quality which he thought analyzable, it was the predicate referring to the degree. That, in fact, is why in 6.3751 he denies that 'this is red' is atomic. The point here, however, is that 'this' in 'this is red' refers to a shade of red, not the kind of thing the realist calls an individual.

The breath taking advance in Wittgenstein's philosophical career took place between the "Notes" and the Tractatus, not between the Tractatus and the 1929 paper, as Anscombe's interpretation would lead one to believe. What obscures that advance is the fact that his terminology remains Fregean even though he engages in a rather wholesale rejection of Frege. Moreover, his use of that terminology is slipshod, not at all up to the standards one expects of a philosopher. Certainly, Anscombe was mislead by his careless use of such terms as 'function' and 'form'. I turn now to a sketch of the advance, pointing to the roots of his confusion and to certain structural connections which uncover the reasons for his neglect of, or, inability to solve, the realism-nominalism issue.

In the "Notes" Wittgenstein was preoccupied with ridding the world of Fregean senses and the True and the False. He showed no real concern with functions and names, except inso-
far as he wished to secure the claim that sentences are not names. To secure it, and it must be secured if Fregean senses are to be eliminated, all one needs to do is to show that the meaning of a sentence is a composite of the meanings of its constituents. In the "Notes" he took the constituents to be names and indefinable forms (i.e., Fregean functions). For what he was about they served the purpose. In the *Tractatus* they did not.

New considerations came into play in the *Tractatus*. They complicated matters, for he was still preoccupied with keeping Fregean senses and truth values out of the world. The new considerations were primarily the picture theory, which was to aid in the banishment of truth values, and the analytic-synthetic distinction. In order for the picture theory to succeed there could be no objects standing alone; they had to be in combination. Accordingly, Frege's saturated-unsaturated distinction had to be abandoned, for it permitted objects to stand alone. All entities, both indefinable forms and objects, could exist only in combination. To achieve that, Wittgenstein held all signs to be functional in character. Accordingly, he embraced both individuals and characters as existents. However, since he failed to grasp the essential core of the theory of types and was unable to illuminate the doctrine of logical form (in this case exemplification), he obliterated all distinctions between individuals and
characters. Thus, both remained just "objects," which somehow "hang together" in facts.

Why does he not give examples of the objects he has in mind? Why was he silent? His silence is not that of a disinterested philosopher, one preoccupied with other issues. His silence is prompted by a related issue. For, though he did not know what the objects were, he knew what they were not. His knowledge was grounded in his preconceived ideas regarding what was contradictory. As we saw, those ideas were involved in his picture theory.

'This is red and green' is analytic (cf. 6.3751). That is his claim. Thus, neither 'this is red' nor 'this is green' can be atomic; i.e., neither 'red' nor 'green' can be undefined. Wittgenstein, then, dedicated himself to securing the truth-table analyticity of what has traditionally been called synthetic-a-priori sentences. His refusal to accept 'red' and 'green' as undefined is, therefore, not due to any prejudice against universals. It is due purely to his concern with the analytic-synthetic issue. Putting the matter in those terms is somewhat misleading for, as we saw, 'this' in 6.3751 was held to refer to a particular shade, which, as we also saw, is a universal. Here the difference makes no difference. The point is that universals are not construed as logical forms in the Tractatus, even though the doctrine of
logical form in the sense of analyticity plays a crucial role in determining their status.

In 1929 Wittgenstein gives up the belief that the analyticity of synthetic- \textit{a-priori} sentences can be secured by defining "degree attributes." Giving up that belief he unabashedly accepts the most objectionable sort of universals, viz., numbers. In the 1929 paper he does not abandon classical analyticity though. He merely puts forth a new program, syntactical in nature, for showing that 'this is red and green' is contradictory. Eventually he abandoned it, and with it the \textit{Tractatus}, returning, ironically enough, via a use theory of meaning and the doctrine of family resemblance, to the program of the \textit{Tractatus}, namely, "defining" color words.
Consider 'Peter believes that London is west of Berlin'. One question which philosophers ask themselves is: (a) What is the sentence about, or, perhaps better, what does the sentence refer to? Commonsensically, it refers to a person with a certain mental state, namely the belief that London is west of Berlin. Another question philosophers ask themselves is: (b) How is the belief that London is west of Berlin about the fact that London is west of Berlin, or, again, perhaps better, how is the belief and what it is about related? (a) and (b), though both questions about aboutness, if I may so express myself, are distinct questions. (a) asks how language, in this case a sentence mentioning what has come to be called a propositional attitude, is about the world; (b), how thought, in this case belief, is about the world. A philosopher who fails to distinguish between (a) and (b) because he fails to distinguish between language and thought is in danger of committing himself uncritically to behaviorism. For, his failure to make the distinction may become a prelude to identify a thought (mental state) with the sentence (a physical type or token) which expresses it.
The early Wittgenstein failed to distinguish clearly between (a) and (b). The burden of this chapter is to exhibit his failure and to unearth the structural motives behind it.

(b) and the several further questions dialectically included in it are perhaps the most difficult in first philosophy. Answering them amounts to locating mind ontologically or, as Broad put it, allocating mind its place in nature. Since I believe both that Wittgenstein was cognizant of the importance of (b) but nevertheless confused it with (a), it will be prudent to comment briefly on the confusion. This should dispel the fear that I attribute to Wittgenstein a much too primitive mistake and at the same time provide some perspective for the subsequent analysis.

In the Investigations, as we saw, Wittgenstein holds, at least implicitly, both that mental entities are ineffable and that the problems of mind can be solved by describing the use of mental terms, e.g., 'believe' and 'remember'. Notwithstanding the subtleties, that amounts to denying that (b) is intelligible and, thus, to substituting (a) for (b). Such an analysis, or, more accurately, pattern of analysis, is inadequate. Nevertheless, at least the later Wittgenstein faced the issue boldly, explicitly arguing for the substitution. In the Tractatus he did not. There the substitution has all the earmarks of a straightforward confusion.
If, however, the substitution is an intentional one, as Anscombe seems to argue, it is covert, taking advantage of the numerous ambiguities latent in both (a) and (b). Be that as it may, one thing is clear: Wittgenstein, throughout his life, believed that an answer to (a) was adequate for the solution of the problems implicit in (b). Such a belief leads inevitably to behaviorism. In the early work the behaviorism shows itself in the identification of a thought with the sentence expressing it; in the later work, by the more subtle identification of bodily behavior (including speech) with the mental state which it makes known (to an observer).

With respect to the problems of mind, a close examination of the *Tractatus* reveals two opposing doctrines. The behavioristic one, as I shall call it, is that thought is the relation between a sentence and what it is about. The imagistic one, as I shall call it, is that thinking is imaging, i.e., that to think about something is to make, quite literally, a mental image of it. The imagist doctrine is merely latent, becoming overt and fully intelligible only after one has examined Wittgenstein's later efforts, e.g., *The Blue and Brown Books* and *Investigations*. One reason for its early latency is that it is subtly woven into both the reference theory of meaning and the picture theory of language. Another is that, though the imagist doctrine is in opposition
to the behavioristic one, there are several verbal bridges, e.g., those built on 'picture', which help to blur the opposition. The behavioristic doctrine is overt in the *Tractatus*. Its dominance is unmistakable. Accordingly, it shall here receive the lion's share of attention. However, both doctrines are immensely important. On the one hand, the eventual rejection of the imagist doctrine together with its alleged supporter, the reference theory, provides the ground for the ineffability thesis of the *Investigations*, which has been discussed in Chapter III. On the other hand, the behavioristic doctrine provides a firm base for the later behaviorism. For, though the later and earlier behaviorism are clothed differently, each has the same body.

An interesting and rather curious feature of Wittgenstein's thought is its excessive reliance upon analogies, models and similar devices. Indeed, each phase of his thought is dominated by a single model. In the later phase language is compared to a game, with chess the paradigm. In the earlier phase the referential feature of language is seen as the projection of the elements of one plane onto those of another which is parallel to the first. The early model is the vehicle for the behaviorism. The imagist doctrine also utilizes the early model though with a significant variation, namely, the addition of a third parallel plane. Since the chess
model becomes dominant only in the *Investigations* we need not here consider it. However, it will pay to look closer at the behaviorist model and its imagist variant. For, aside from illuminating their respective doctrines, they provide an insight into why the early Wittgenstein was unable to pay mind its ontological due.

The behaviorist model is simple. Language and the world are like two parallel planes, the elements of which, sharing a form, are in one-to-one correspondence. Thought is taken to be the "projecting relation" between them, or, more precisely, the projecting relation emanating from the linguistic plane, for it is language which means and the world which is meant. This model clearly precludes the possibility of locating mind ontologically. Thought at best is the meaning relation which holds between a physical sign and what it refers to. Or, to express myself as I did above, this model compells Wittgenstein to substitute (a) for (b).

The imagist model consists of three parallel planes; one representing thought; one, language; one, the world. Again, the elements of all three, sharing a form, are in one-to-one correspondence. Within this model the projecting relation is more or less ignored. For, the only purpose of the model is to suggest a solution of a single problem, namely, how one knows the meant of a word in its absence. The proposed solu-
tion is that thought consists of images of the means. Of this later. The point here is that, again, the ontological status of mind is impaired. For, the mental entities, at least implicitly, are not thought of as things among things which can, like all things, be referred to by words. Furthermore, the connection between the philosophical idea of being an existent, on the one hand, and the idea of being nameable or referable, on the other, is a familiar one. That is why I claim that in its own subtle way the imagist model contains a behaviorist suggestion. To put the point more specifically, in the imagist model there is no meaning relation connecting the images with either the words or the things. There is only a meaning relation between words and things. Thus the images remain dangling. Again, (b) is pushed into the background, for attention is directed away from the relation between thought (image) and object.

A letter to Russell in 1919... throws further light on this. Russell had asked: 'But a Gedanke /thought/ is a Tatsache /fact/: what are its constituents and components, and what is their relation to those of the pictured Tatsache?' To this Wittgenstein replies: 'I don't know what the constituents of a thought are but I know that it must have constituents which correspond to the words of language. Again the kind of relation of the constituents of the thought and of the pictured fact is irrelevant. It would be a matter of psycholoty to find out.'

The letter makes clear Wittgenstein's dismissal of (b)
as a "matter of psychology." I need merely add that psychology's method is behavioristic to uncover one bridge from methodological to metaphysical behaviorism. Nor is that the only such bridge. For example, both a thought as a set of objects and a sentence as a set of words are pictures, both picturing the same fact in the world. If the two pictures are not carefully distinguished, one might well be tempted to collapse the planes of thought and of language, making one thing out of two. This, as we shall see, is precisely what Wittgenstein did. For the moment it is enough to see that the models to which Wittgenstein appeals in order to express himself preclude an ontological place for mind.

Mind's proper place, stated in terms of the model that predominates Wittgenstein's early thought, may be located as follows. There are really but two planes; one of language, one of the world. However, the world contains in fact mental entities as well as nonmental ones. Moreover, there is a unique relation between the two, namely, the meaning relation (aboutness) which goes from the mental entity to the nonmental one (and other mental ones). The immediate point does not depend on these differences, though. What is at stake at the moment is that the ontological status of mind must be secured, in the only way in which in these patterns it can be secured, by the inclusion in the ideal language of undefined terms which refer to mental entities. This cannot
be done correctly as long as one is dominated by a model which contains in one plane all mental things and in another all things which, however implicitly, are thought to exist.

According to current ordinary-language philosophy one of the great absurdities of logical atomism is the reference theory of meaning. That view is inherited from the later Wittgenstein who made it the whipping of his early thought. As is so often the case, the boy is not to blame. In fact, he has done no wrong. His guilt is one of association, a spurious one at that. The later Wittgenstein sees (incorrectly) the reference theory as the instigator of the absurd imagist doctrine. Thus, in rejecting (correctly) the imagist doctrine he (incorrectly) purges himself of the reference theory.

The reference theory of meaning is properly formulated in the context of an artificial language. In that context it simply means that an undefined sign stands for or represents an object. For example, $f_1$, say, stands for the color red; or, as it is sometimes said, $f_1$ means red, or, names red. 'Means' and 'names' are, however, dangerous terms. Taking them uncritically one may be tempted to think that the sign has some power, as it were, which "points to" the object it stands for. Such "anthropomorphism" of the language is not uncommon in the history of philosophy. That
does not make it any the less deplorable, though. That a sign means or names an object merely means that the maker of the language stipulates that a certain sign stands for a specific object; e.g., 'red' for red. This is true, incidentally, of natural as well as of artificial languages. As it has once been put, signs don't mean, we mean by means of them.

It is true, of course, that the introduction of undefined descriptive signs into an artificial language to be employed for philosophical purposes is governed by other considerations as well. But these in no way embarrass the reference theory. For example, a philosopher intent on explicating 'exist' will attempt to number among the undefined signs of his L only signs which refer to simples. (A simple is the referent of a word whose meaning can only be learned ostensively, as one says. Thus, 'red' refers to a simple. At least, that is one explication of that troublesome word.) Such words are often referred to as mere labels, or, in an overlapping context, as words which refer to things which are wholly presented in a specious present. Such formulations lend themselves to misinterpretation, especially in the hands of philosophers. Be that as it may, the difficulties that may or may not attend them must be properly distinguished from those which allegedly attend the reference theory. This latter theory, I reiterate, properly formulated as I tried to formulate it, is as unproblematic as it is commonsensical.
Now for three comments, each of which exposes a spurious connection between the reference theory and certain other doctrines or problems.

1. An artificial language is constructed and interpreted with ordinary language as the metalanguage. Accordingly, the reference theory, i.e., the deputizing of signs for things, has nothing whatsoever to do with the purely psychological problems of how one learns what a sign refers to or of how one carries, as the psychologist says, the meaning. Those problems have their place in the context of psychology. What a sign means (stands for), how the meaning is learned, and how it is carried or retained are three distinct problems. Only the first concerns the philosopher. Moreover, his concern is minimal, for he is not an anthropologist; that is, he is not engaged in linguistics.

2. The reference theory has a commonsensical core which is quite independent of the artificial-language context. There are many words of our natural language which refer to objects with which we are acquainted. 'Yellow' and 'horse', for example, both refer to objects with which we are acquainted. For what I am about the fact that the latter can be defined whereas the former cannot makes no difference. The point here is that such words refer to or name their referents. We also say that one knows what they mean if one knows
what they refer to. It is, however, a gratuitous leap to infer from this that when hears such a word uttered in the absence of its referent one does not know what it refers to; or, as Wittgenstein puts it, that in the absence of the object one must have a mental image of it in order to know what it refers to. This gratuity is based on a purely verbal bridge which confuses two uses of 'know'. The bridge is built as follows. (i) The meaning of a word is its referent. (ii) To know the meaning of a word is to know its referent. (iii) To know the referent of a word is to be acquainted with it. (iv) Therefore, if one utters truly, 'This apple is not green' one must in order to know what he means have a mental image of green. For, to know the meaning of 'green' is to be acquainted with it and in this case there is no visual color with which to be acquainted. 'Know the meaning' is the troublemaker. In the one case it is used in the sense of acquainted with and in the other in the sense of how such acquaintance is retained or carried. Hence, even though, first, the meaning of a color word is the color it refers to and, second, to know what it refers to one must have (once) been acquainted with it, it does not follow, third, that one who knows the meaning of the word must while he knows it (uses) be presented with the color or, at least, with a mental image of it. The spuriousness of the argument stems from the
failure to distinguish the meanings of 'know'. In one sense of 'know' one only knows what is at the moment presented to one (or what at the moment one has an image of). In the other sense, one knows the meaning of a word if one is capable of (as the psychologist says) carrying its meaning, i.e., one knows what a word means if one knows how to use it. Or, to say the same thing somewhat differently, one must have once been acquainted with the referent of a word, at least if it is undefinable, before one can use it. Or, still differently, one must know the meaning of a linguistic simple in the sense of being once acquainted with it before one can know the meaning in the sense of being able to use it.

3. The later Wittgenstein propounds as a substitute for the reference theory the doctrine that the meaning of a word is its use. As it is meant that is absurd. Or, to speak as the later Wittgenstein might have spoken, that is not how we use 'mean' when speaking commonsensically about, say, the color words. Nevertheless, Wittgenstein has a point. First, the question of whether another knows the meaning of a word is answered by watching how he uses it. Second, 'knowing the meaning of a word' has a sound use, dispositional in character, which means "knowing how to use a word." But from this it does not follow that the meaning is the use, any more than it follows from the reference theory that
knowing the meaning of a word after having been acquainted with its referent requires having a mental image of the referent. Or, to say the same thing differently, there is a difference between what a word means (what it refers to) and someone knowing what it means. This distinction must be heeded both in the case of the reference theory and in the case of the use theory. Wittgenstein's mistake in both phases of his career is his failure to honor it. In the early phase he collapses the two, viz., meaning and knowing the meaning, into meaning, thus ending in imagism. In the later phase he collapses them into knowing the meaning (knowing how to use), thus ending in panlinguism.

Let us now turn to the Tractatus, tracing the manifestation of the imagist doctrine.

2.131 The elements of the picture stand, in the picture, for the objects.

3.22 In the proposition the name represents the object.

3.02 The name means the object.

3.221 Objects I can only name...

3.26 The name cannot be analysed further by any definition. It is a primitive sign.

3.261 Every defined sign signifies via those signs by which it is defined, and the definitions show the way.

2.1 We make ourselves pictures of facts.

3 The logical picture of the facts is the thought.
"An atomic fact is thinkable"—means: we can imagine it.

The totality of true thoughts is a picture of the world.

2.131–3.02 and 3.221–3.261 state the reference theory of meaning and the doctrine of simples, respectively. Much of what needs to be said concerning them has already been said. The rest is safely ignored for the moment. I merely repeat that notwithstanding the substantial connections between the two doctrines, the former does not require the latter, though the latter does require the former. This is important because the later Wittgenstein fails to realize the differences between them and, thus, believes that by rejecting simples, he has rejected the reference theory, just as he mistakes the rejection of the imagist doctrine for a rejection of the reference theory. 2.1–3.01 are the passages of immediate significance. They flatly affirm that thinking is imaging. That is, they assert that in thinking about a state of affairs one has a mental image of it. This, of course, is the very heart of the imagist doctrine. It may be formulated as follows: the meaningful utterance of a sentence requires the presentation at the moment of utterance of the referents of all the descriptive terms occurring in it. Call this formulation P. To see that P requires images one merely has to consider that one frequently asserts mean-
ingfully true negative sentences in situations where some of the referents are not present in, say, the visual field. Hence, it is thought within this pattern that there at least be an image of the referent present in the mind. Of course, one could deny that such sentences are meaningful. However, not even Wittgenstein is willing to countenance that absurdity.

As I have indicated before, P is not explicit in the *Tractatus*. It is nevertheless an important ingredient in Wittgenstein's thought. Together with the picture metaphor it is at the roots of the doctrine that thinking is imaging which in turn plays an obvious role in his attitude toward the synthetic *a priori*. The structural significance of P and its spurious "deduction" from the reference theory has already been examined. I turn now to its biographical or historical significance. Consider the following passages from the later work:

*If I give someone the order 'fetch me a red flower from that meadow', how is he to know what sort of flower to bring, as I have only given him a word? Now the answer one might suggest first is that he went to look for a red flower carrying a red image in his mind, and comparing it with the flowers to see which of them has the colour of the image.*

It seems that there are certain definite mental processes bound up with the working of language, the processes through which alone language can function. I mean the processes of understanding and meaning. The signs of our language seem dead with-
out these mental processes; and it might seem that the only function of the signs is to induce such processes, and that these are the things we ought really to be interested in. Thus, if you are asked what is the relation between a name and the thing it names, you will be inclined to answer that the relation is a psychological one, and perhaps when you say this you think in particular of the mechanism of association. — We are tempted to think that the action of language consists of two parts; an inorganic part, the handling of signs, and an organic part, which we call understanding these signs, meaning them, interpreting them, thinking. These latter activities seem to take place in a queer medium, the mind; and the mechanism of the mind, the nature of which, it seems, we don't quite understand, can bring about effects which no material mechanism could. Thus, e.g., a thought (which is such a mental process) can agree or disagree with reality; I am able to think of a man who isn't present: I am able to image him, 'mean him' in a remark which I make about him, even if he is thousands of miles away or dead.5

...it may seem essential that, at least in certain cases, when I hear the word 'red' with understanding, a red image should be before my mind's eye. But why should I not substitute seeing a red bit of paper for imagining a red patch?

... We could perfectly well, for our purposes, replace every process of imagining by a process of looking at an object or by painting, drawing or modelling; and every process of speaking to oneself by speaking aloud or writing.6

Supposing we asked: 'How can one imagine what does not exist?' The answer seems to be: 'If we do, we imagine non-existent combinations of existing elements'. A centaur doesn't exist, but a man's head and torso and arms and a horse's legs do exist. 'But can't we imagine an object utterly different from any one which exists?' — We should be inclined to answer: 'No; the elements, individuals must exist. If redness, roundness, and sweetness did not exist, we could not imagine them.'7
These passages, therapeutic exercises designed to purge the author of his early "errors", leave no doubt that P plays a substantial, though behind-the-scenes, role in the Tractatus. Moreover, they make it evident that one bridge which he crossed in moving from the reference theory to the imagist doctrine was the problem of how one can meaningfully say what is false, or, what in this case amounts to the same thing, of how one can meaningfully assert, truly, a negative sentence. The bridge collapses upon exposing the ambiguity of 'knowing the meaning of a word'. That has been done. There is no need to do it once more. Two general comments are needed, though. One. The passages are heavily psychological. They are concerned with the problem of mind's role in the use of language, or, more accurately, the problem of how meaning is carried. That suggests that Wittgenstein construed the reference theory psychologically, thus preparing the way for the imagist doctrine. What Wittgenstein failed to realize was that the construction and interpretation of an artificial language neither intends to solve psychological problems nor does it in fact solve them. It is a tool for philosophical analysis and as such proceeds commonsensically. It no more alters the truths of psychology which are commonsensical, than does ontology alter the truths of physics. Accordingly, if the last quoted passage is taken as specify-
ing a "meaning criterion" (i.e., specifying the PA), then I for one would endorse it. But that is not the way it is meant. As an answer to the question what "meaning" is, either ontologically or psychologically, I reject it and it is in that sense that it is meant. Two. The passages are heavily dialectical, revealing that Wittgenstein has still not grasped the distinction between the philosophical and the commonsensical use of words. For, if 'image' is used commonsensically, it is quite apparent that the imagist doctrine is false. One does not need to be convinced dialectically of that. The problem is to explicate the philosophical uses which lead from the unproblematic reference theory to the absurd imagist doctrine. That, I suggest, is what I did in exposing the ambiguity of 'knowing the meaning of a word'.

It is unnecessary here to swell on these passages, notwithstanding the interesting confusions they contain, e.g., the failure to distinguish the case of a false sentence from that of a vacuous definite description (definitions of species not exemplified). However it is necessary to exhibit some of the imagist doctrine's important associates.

1. The picture metaphor which pervades the Tractatus is a blatant fellow conspirator. Certainly the assertion (2.1) that we make ourselves pictures of facts cannot help
but re-enforce the imagist doctrine. In other words, the "grammar" of 'mental picture' (3 and 3.01) and 'mental image' cannot fail to support each other.

2. One of Wittgenstein's persistent desires was to secure a privileged status for such sentences as 'Nothing is both red and green'. Since he holds both that what is thinkable is possible and that thinking is imaging it is not difficult to understand how he came by his conviction. There is no doubt that no one can imagine a spot which is both red and green. Unfortunately, Wittgenstein construes uncritically this occurrence of 'cannot' logically rather than psychologically. It is worth noticing that the statement that one cannot imagine a spot which is both red and green is quite unlike the statement that one cannot understand a given string of words. Wittgenstein eventually tells us that the former is an instance of the latter when he tells us that 'Something is both red and green' is logical (grammatical) nonsense. That is what I meant by saying that his construing of 'cannot' as logical is uncritical.

3. The correspondence theory of truth is another associate. As we saw, the imagist doctrine stems from worrying about how one can assert truly a negative sentence. A suggestive solution, one which seems to have tempted Wittgenstein, is that one compares a mental image with a percept,
and, finding that the latter lacks a property which the former contains, makes the true negative assertion.

4. The correspondence theory also bears a close relation to the synthetic-a-priori issue. Suppose that there is something in the world which is both red and green. How, one might ask, would I ever know it, since being unable to imagine it, I could not recognize it? In this argument 'recognize' is the crucial word. The psychologism of the argument itself is unmistakable. I merely notice once more that the locus of many of Wittgenstein's problems is psychology.

Wittgenstein's behaviorist doctrine, or, perhaps better, what I have diagnosed as the structural root of it, viz., that mind (or thought) is the meaning relation between a word and a thing, emerges most clearly in the passages which state his solution to the problem of intentional contexts. Before examining them, let me first describe the problem. Consider again 'Peter believes that London is west of Berlin'. Call it A. Since A is commonsensical it must be possible to transcribe it in the ideal language. For, one of the conditions for an improved language being ideal is that it permit the transcription of everything which is commonsensical.

Wittgenstein's improved language and, for that matter, all of the candidates proposed by the logical atomists, contain no pseudopredicates, i.e., it contains no sentence schema of
the form 'xøp'. In fact, his ideal language is merely a special case of such a language. For, as he says in 5.54: In the general propositional form, propositions occur in a proposition only as bases of the truth-operations. Or, to say the same thing more traditionally, Wittgenstein accepts the thesis of truth-functionality which is a special case of the so-called thesis of extentionality. The former states that the ideal language contains only sentences which are either atomic or truth function of atomic ones. Clearly, a sentence of the form 'xøp' is neither atomic nor a truth function, for its truth does not depend on the truth or falsity of 'p'. A, therefore, cannot be transcribed straight-forwardly in his improved language. Nor, for that matter, is it all obvious how, under the condition of truth-functionality, it can be transcribed. Two possibilities present themselves. Each amounts in the final analysis to transcribing such sentences as A in atomic forms.

One. One might argue that in A the phrase 'that London is west of Berlin' is a name. Then A could be transcribed in a sentence of the form 'xRy'. This gambit fails on many grounds. One of these Wittgenstein sees. Since what can be named exists, the referent of 'that p' must exist. His objection to this gambit runs as follows: what thus would have to exist is a most peculiar entity, not at all "simple" like
what is named by \( f \) or \( a \). The merit of the argument need not detain us here, even though later I shall argue that 'that \( p \)' is a name of a (mental) universal. The referent of such phrases as 'that \( p \)' have traditionally been called propositions, or senses. Propositions in this sense are not, by the way, mental entities. These entities were (correctly I think) unacceptable to Wittgenstein. Indeed, his rejection of them marks his most profound disagreement with Frege. Of that later. The immediate point is merely that Wittgenstein could not conceive of 'that \( p \)' as a name, because he did not accept its alleged referent as an existent.

Two. One might argue that \( A \), as actually a relational statement which expresses a relation between Peter and the constituents of the fact expressed by the that clause, rather than expressing a relation between Peter and a proposition. This gambit, slightly modified, Wittgenstein tried in the "Notes". In the Tractatus he modified it further. Consider the following passages.

5.54 In the general propositional form, propositions occur in a proposition only as bases of the truth-operations.

5.541 At first sight it appears as if there were also a different way in which one proposition could occur in another. Especially in certain propositional forms of psychology, like 'A thinks, that \( p \)', or 'A thinks \( p \)', etc. Here it appears superficially as if the proposition \( p \) stood to the object \( A \) in a kind of
relation. (And in modern epistemology (Russell, Moore, etc.) those propositions have been con­ceived in this way.)

5.542 But it is clear that 'A believes that p', 'A thinks p', 'A says p', are of the form 'p says p': and there we have no co-ordination of a fact and an object, but a co-ordination of facts by means of a co-ordination of their objects.

5.5421 This shows that there is no such thing as the soul—the subject, etc.—as it is conceived in contemporary superficial psychology. A composite soul would not be a soul any longer.

The modification alluded to above is Wittgenstein's re­jection of Peter, or rather, of Peter's mind, as an existent. His reasons are two; the first explicit, the second implicit. (a) He maintains that "the thinking, presenting subject; there is no such thing" (5.631). On the surface this amounts to denying that one is acquainted with a "self". In the total dialectics, as should now be clear, it leads to the re­jection of mental entities. (b) He is sensitive to the fact that mental activity is unique, possessing, as one may say, an intentional character. If therefore, believing, thinking, etc. were relations obtaining between a self and the constitu­ents of a fact that character would be lost, at least syn­tactical. Syntactically, they would be in the same boat with spatial relations, lacking that directional feature which is sometimes symbolized by an arrow. (Notice the irony; the image is spatial.) To preserve this intentional character of thought Wittgenstein affirms (5.542) that all words ex-
pressing mental activity are of the same form; they are, so
to speak, all instances of an arrow. As far as this goes it
is incorrect, though it leaves one with the problem of how to
distinguish between, say, an instance of believing and one of
doubting. This, however, is a further question and one which
I shall ignore since Wittgenstein does likewise. The impor-
tant thing is that Wittgenstein requires the arrow to emanate
from something other than a self, from something which can
be plausibly construed as intending or meaning something, in
an active sense of those words. What is that something?

The crucial sentence is "'p' says p'. The crucial ques-
tion is: What does "'p'" refer to? Wittgenstein only tells
us that it refers to a fact, something composed of objects
with a definite form. There are two possibilities. (1)
"'p'" refers to a sentence, written or spoken, in which case
the objects are words. (2) "'p'" refers to a "thought" in
which case the objects are mental entities. As I have al-
ready stated, Wittgenstein opts for (1). Anscombe disagrees,
arguing that he opts for (2), or, at least, does not exclude
(2). In defending my claim I shall, first, argue for it
directly, and, second, indirectly by showing that even Ans-
combe agrees. Consider the following passages:

3.1 In the proposition the thought is expressed per-
ceptibly through the sense.

3.11 We use the sensibly perceptible sign (sound or
written) of the proposition as a projection of the possible state of affairs. The method of projection is the thinking the sense of the proposition.

3.12 The sign through which we express the thought I call the propositional sign. And the proposition is the propositional sign in its projective relation to the world.

3.13 To the proposition belongs everything which belongs to the projection; but not what is projected.

3.14 ... The propositional sign consists in the fact that its elements, the words, are combined in it in a definite way. The propositional sign is a fact.

3.141 The proposition is not a mixture of words... The proposition is articulate.

Wittgenstein's purpose in these passages is to establish a distinction between propositions and propositional signs. The latter is a well-formed string of signs. The former is the well-formed string plus the meaning relation obtaining between the propositional sign and the fact it expresses. The meaning relation is supplied by the mind in "thinking the sense of the proposition." This, I submit, is the burden of 3.11 and 3.12. Both 3.14 and 3.141 re-enforce this interpretation. For, notice that both the proposition and the propositional sign are spoken of as consisting of words. The only difference between them is that the latter contains, supplied by mind, the meaning relation whereas the former does not. It may well be that Wittgenstein con-
strues the meaning relation in terms of images, thus conceiving the proposition as a sentence accompanied by images. For the point at hand the difference makes no difference; the point being that ''p'' in ''p' says p' refers to a sentence, be it spoken or written, in inner or outer speech. 'Says', of course, refers to the meaning relation, i.e., to what Wittgenstein calls the projecting relation which most properly is the contribution of the mind. Mind, then, in the ontological sense is no more and no less than a physical mark plus the "ineffable" say relation, or, more narrowly, the relation between a word and its referent.

Anscombe who suggests that ''p'' may refer to a thought which in no sense is verbal admits that..in ''p' says p' what is being considered is the propositional sign, mental /which I take to mean inner speech/ or physical; and it was of course primarily of the physical sign that Wittgenstein was thinking."8 Anscombe's suggestion, namely, that ''p'' may refer to a nonverbal thought, is an admirable attempt to save Wittgenstein from flying in the face of commonsense, yet when she looks at the matter without the advocate's partiality she admits that Wittgenstein makes mind in the image of language, if not language itself. To repeat, though he is not completely explicit regarding the referent of ''p'', it seems clear that Wittgenstein argues that intentional con-
texts are to be transcribed in the ideal language as a peculiar relation between words and their referent.

Now for four comments each of which calls attention to a peculiar feature of the relation: say (in "p" says p') which Wittgenstein introduces in order to handle intentional contexts.

1. Wittgenstein asserts (5.542) that say obtains not between the facts themselves, referred to by "p'" and 'p', but between their constituents. The assertion rests squarely on the thesis that the ideal language is truth-functional, i.e., that it contains only sentences which are atomic or molecular. That thesis is a pillar of the Tractatus (cf. 5). Its underpinning is obscure, though two of its structural supports are discernible: (a) the envisaged explication of analyticity, (b) the determination to reject Frege's hypothesis of the True and the False.

(a) One task which the classical analytical philosophers all set themselves was the explication of the modal words. Wittgenstein's contribution to the job cannot be minimized. First, his insistence that the syntactical and semantical features of the ideal language be sharply distinguished is the key to the explication. For, in the most general sense, an analytic sentence is one whose truth is dependent only on its syntax. Second, the truth tables explicate analyticity in
those cases where it depends only on the connectives. However, Wittgenstein mistakenly thought that the truth tables had to explicate all instances of analyticity. This mistake is more than understandable, it is excusable. For, when he wrote, mathematicians had not yet shown how, by means of the idea of an identical formula, set theory could be applied to distinguish analytic from synthetic in the case of statements containing operators. Lacking that knowledge he was tempted into embracing the thesis of truth-functionality, arguing that operators are expendable. However, even if he had included operators, it would not have helped him in the crucial case under consideration. To see that clearly just consider PM. With the extentionality axiom added it is extensional, though, of course, not truth-functional, for the simple reason that \((x)f(x)\) is just not truth-functional. PM, however, is truth-functional, provided the extentionality axiom is added, in the limited sense that if, say, \(p_1 \equiv p_2\) is true, \(p_1\) says \(p_1\) and \(p_2\) says \(p_1\) would have to be both true or both false. It follows that 'says' cannot be transcribed in PM.

Only recently has it been realized that an undefined logical pseudo-predicate standing for the root meaning of 'say' can be introduced in the ideal language without precluding an adequate (and, of course, syntactical) explication
of the analytic-synthetic distinction. Again, lacking this knowledge, Wittgenstein saw no other way out but to claim that say obtains between the constituents of the facts and not between the facts themselves, thus making the transcription of, say, 'A believes p' atomic.

(b) Frege, for reasons that are irrelevant here, reified the True and the False. Wittgenstein set himself the task of demonstrating that they are ontologically dispensible. His gambit was to specify the conditions under which a sentence is true (or false). Whether or not the gambit solves anything is at the moment immaterial. For, here I merely wish to exhibit a bridge leading from his concern with verification to his later behaviorism. In the case of atomic sentences Wittgenstein hit upon the picture theory; in the case of molecular sentences, upon the truth tables. All other sentences he tried to transcribe into one or the other of those forms.

If, however, one reflects on how one verifies a sentence of the form 'p' says p', it is evident that it is more complex than the usual atomic sentence. Recall that sentences of that form are about words and what they mean. How does one verify them? The answer is obvious: watch how people use words. This, I submit, is one of the structural bridges to the later use theory and, thus, to the later be-
behaviorism. For, since "p' says p' is his solution to the problem of acts, specifically to the problem of the intentionality of mental acts, and since sentences of that form are verified by investigating linguistic behavior, it is not surprising that he eventually construed the intentionality of thought behavioristically.

2. A language may be viewed in either of two ways: (a) as a picture of the world, or (b) as a part of the world. An ideal language philosopher constructs a schema which when viewed as a picture of the world may be used to solve philosophical problems. However, it can only be talked about as a picture if it has first been talked about as a part of the world, i.e., if our philosopher has, in constructing and interpreting it, made it a picture of the world. Wittgenstein unconditionally says that it makes no sense to talk about talking. That is the point of his ineffability thesis. Accordingly, he rejects (b). For him it makes no sense to talk about language as part of the world. Yet in "p' says p', he claims that "p'" refers to a fact consisting of words which are construed as part, not as picture, of the world. Hence, he at least implicitly admits that talking about talking is intelligible. The inconsistency is patent.

3. "p' says p' is atomic. Hence 'says' refers to a simple, nonmediated relation allegedly obtaining between
noises (words) and things. There is no such relation, or, more precisely, there is no such simple relation. To repeat a remark made above, words do not mean, we mean by means of them. In fact, Wittgenstein himself appears to know better. At least, 3.1 - 3.141 gives that impression. Yet, in 5.542 he succumbs to an anthropomorphic view of language which is forced upon him, on the one hand, by an uncritical acceptance of the thesis of truth-functionality and, on the other, by his attempt to escape an ontology which includes Fregean senses. In passing it is worth noting that in The Blue and the Brown Books Wittgenstein seriously treats the problem of how language "acquires life."

There is no simple, nonmediated meaning relation (say) obtaining between language and what it refers to. To claim that there is, is to lapse into an anthropomorphic view of language. Yet, there is obviously a meaning relation between language (as part of the world) and what it is about. It is highly complicated one (in the scientific sense), being mediated by the language user. 'Mediated' is an explosive word, capable of producing a view as absurd as the anthropomorphic one, namely, the view that the meaning relation is contributed by the mind (in the nonbehavioristic sense), or, is mind. Recall that Wittgenstein seems to embrace such a view at times.
Recently, Grossmann has lucidly stated the correct analysis. The meaning relation is mediated in the sense that words mean what they do to a user of the language. That is, logically considered, 'means-p' refers to a complicated relation between noises (words) and a person. Consider the following behavioristic definition of 'means-p'.

D. 'means-p(x,0)' for '/R(x,0) S_1(0) \rightarrow S_2(0)'.

D reads: "'x means p to 0' means by definition 'If there is a certain R obtaining between 0 and x and 0 is in a certain state S_1, then 0 will be in a certain state S_2'." Notice that the English phrase 'means p' is transcribed as 'means-p', that is, as a relational term which does not contain the part 'p' for which one could substitute another expression, say, 'q'. The following remarks will help to make the definition clear. One. R is highly complex. So, too, are S_1 and S_2. Scientifically, their description may have to contain neurophysiological data as well as verbal responses and overt behavior. Such complexity is a matter of scientific detail, which though important there makes no difference here. Two. 'x' and '0' refer to a noise (i.e., the sentence) and a person, respectively. The sentence as a noise is a physical object. Accordingly, no substitution can occur in it. The significance of this is that it allows one to escape the problems of intentional contexts in the behavioristic reconstruc-
tion. That is, though two sentences, considered as sentences, may be equivalent as a result of substitution, they are considered as noises outside the pale of substitution.

Three. The remark just made also applies to 'means-p'. Since the phrase is taken as a unit, substitution for 'p' cannot occur in it.

The meaning relation between language, as part of the world (i.e., noises or, for that matter, marks on paper), and what it "means" can, therefore, be transcribed behavioristically. That is no solution to the problems of the act, though. Mental entities and noises are two things and not one. Wittgenstein, though aware of the distinction, brushed it aside as irrelevant. It is not surprising, therefore, that, when in his later life he realized that the meaning relation between noises and things is mediated he succumbed to behaviorism. In other words, he continued to believe that this latter relation solved the problems of the act.

4. The historical evolution of the solution proposed in 5.542 merits attention. Consider the following passage from the "Notes on Logic."

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...In 'A judges (that) p', p cannot be replaced by a proper name...The proposition 'A judges (that) p'
consists of the proper name A, the proposition with its two poles, and A's being related to both these poles in a certain way. This is obviously not a relation in the ordinary sense...The structure of the proposition must be recognized and then the rest is easy.\[1]" 

In this passage Wittgenstein does three things. (1) He rejects Frege's analysis. (2) He rejects an early analysis offered by Russell. (3) He proposes his own analysis.

(1) Briefly, Frege argued that mental acts are relations between a mind and a sense (i.e., the entity named by 'that p'). Wittgenstein's objection, to be discussed more fully below, stems from his rejection of the idea that the meaning (sense) of a sentence is an existent. Or, to put the matter simply, Wittgenstein objects to the ontological extravagance of Frege's analysis.

(2) Russell argued that belief was a relation between a mind and the constituents of the fact believed. That is 'A believes aRb' is claimed to be transcribable as (B): 'Bel(A, a, R, b)'. Wittgenstein's objection seems to be that the analysis fails to express what is believed. That is, he seems to hold that Russell's analysis is incapable of preserving the difference between "believing aRb" and "believing bRa." That Wittgenstein is mistaken is easily seen. The difference between B and (B'): 'Bel(A, b, R, a)' is incontestable. What bothered Wittgenstein, I submit, was that Russell's analysis fails to capture the unity of thought,
i.e., in the sense in which mental activity is propositional, intending somehow the fact "as a whole" rather than its constituents. That whole Russell's analysis fails to make explicit. It is not implausible, therefore, to suggest that Wittgenstein fully appreciated what Frege unmistakably captured, viz., the unity of thought, the unanalyzable propositional constituent which is present in all instances of mental activity. Frege's ontological price was too high for Wittgenstein, though. On the other hand, Russell's analysis, though ontologically economical, failed precisely where Frege had succeeded.

(3) Wittgenstein's own analysis is provisional, a sort of halfway house. On the one hand, he accepts Frege's pattern of analysis and, on the other, Russell's ontology. That is, he claims that belief is a relation between a believer and a sense but denies that a sense is an existent. That makes his solution patently inadequate. For what it amounts to is that belief is made into an existent which relates an existent and a nonexistent. Notwithstanding this inadequacy, Wittgenstein moves in the right direction. Structurally speaking, he tries to make belief a pseudo-relation. In the "Notes," however, he does not know how to execute the move. That is one transparent reason why he says that "it is obviously not a relation in the ordinary sense."
By the time of the Tractatus Wittgenstein's thought had matured, or, possibly better, had jelled. By now he (i) rejects the self as an existent, (ii) embraces the thesis of truth-functionality, and (iii) explicitly sets himself the task of demonstrating that senses are ontologically dispensable. (i) prohibits him from construing belief as a relation between a believer and something else. Accordingly, the act disappears. (ii) prohibits him from accepting pseudo-relations. Hence, say is claimed to obtain between the constituents of the facts. (iii) re-enforces (ii). However, the very fact that quotes surround the first occurrence of 'p' (in "'p' says p") reveals that he is still attempting to capture the unity of thought which he originally realized was indispensable. For, "'p'" is a name. Moreover, he realizes dimly that mental activity is by nature intending. That is something which neither Frege nor Russell realized. Unfortunately, in order to introduce that feature he appeals to a linguistic thing, specifically a sentence. Had he construed the referent of "'p'" as a propositional character, i.e., a psychological entity, as Bergmann has recently done, he would have been much nearer the correct solution. Structurally speaking, he could not. For at that point both (ii) and (iii) conspire to push him towards behaviorism. He could only see such a character as a reincarnation of the Fregean
sense. Nor could his truth-functionality thesis bear the burden of a pseudorelation. He did not see how the occurrence of such a relation in the ideal language did not preclude an adequate explication of analyticity.

By way of summary I want to conclude this chapter by relating, structurally as well as historically, Wittgenstein's treatment of mind with those of Frege and Bergmann. Consider again 'Peter believes that London is west of Berlin'. Call it A and call the phrase expressing what Peter believes A*. The question which both Frege and Wittgenstein, and for that matter, all analytical philosophers, ask is: How is Peter related to the fact expressed by A*?

One answer can be immediately dismissed, viz., the one propounding that belief is a relation between the believer and the fact believed. For, if what is believed is not the case, there is no fact to hang the relation on: and no philosopher is prepared to recognize a descriptive relation without two relata. That much of the dialectics of the act every analytic philosopher knew. What it suggests is that to consider facts as existents is no help in the ontological analysis of the fact; or, at least, existing facts will not help unless one is willing to go to the absurd length of "subsisting false facts." It may even be reasonably doubted that this price high as it is buys a solution. At any rate,
confronted by this situation Frege makes another superb, though absurd, gambit.

A sentence is a name, or, more accurately, a double name. That is Frege's gambit. A sentence, of course, is often spoken of as expressing a fact, or, synonymously, as referring to a fact. Such talk Frege rejects, insisting that while a sentence expresses a sense, it refers to a truth value (the True or the False). The gambit achieves a peculiar ontological decomposition of facts; their constituents or building stones being senses, on the one hand, and the True or the False, on the other. That is, a fact is a "compound" of a sense and a truth value. Strange as this analysis is, its complete adequacy for the analysis of the act is strikingly beautiful. Moreover, it fits, at least superficially, with a piece of commonsense which no analyst can afford to ignore, viz., that the meaning of a sentence is independent of its truth or falsity. That is, one can know what a sentence means without knowing whether it is true or false. The crucial question is whether a Fregean sense is an existent. To hold that it is, as Frege did, is the source of the strangeness I just mentioned. Frege, naturally, does not think that such existents are spurious. Wittgenstein disagrees. This disagreement is at the root of all their differences.
In the "Notes on Logic" and the Tractatus it is abundantly clear that, among other things, the early Wittgenstein quite deliberately set himself the task of demonstrating the ontological dispensability of both senses and truth values. Wittgenstein counters Frege's gambit directly, denying that a sentence is a name. He argues instead, first, that the meaning of a sentence is a "composite" of the meanings of its constituents (signs and form, e.g., juxtaposition) and, second, that the True and the False can be accounted for without reification. The latter he achieves by means of the picture theory. In the context of the construction and interpretation of an artificial language Wittgenstein is correct. One does not need to hypostatize meanings and truth values either to keep meaning distinct from truth (falsity) or in order to ground meaning. Nor, for that matter, would Frege have needed to reify them in this context. For, subtleties apart, the constituents of his sentences are themselves meaningful. Yet, Frege saw a need for senses. In this he saw more than Wittgenstein. That emerges most clearly when one inspects their respective analyses of the act. In this game Frege wins hands down.

Frege's analysis of A goes as follows. "Peter", 'believe', and A* name a substance, a relation, and a sense, respectively. Moreover, whether A* is true or false has no bearing whatso-
ever on the truth or falsity of A; another important piece of commonsense which cannot be ignored. According to Frege, whether Peter's belief is a "true belief" depends on whether or not the sense of A happens to be compounded with the True. What it is compounded with is a mere question of fact which does not in the least affect the analysis of belief, or, generally, of the act, which Frege proposes.

Wittgenstein's analysis of the act fails because, far from analyzing the act, he analyzes instead the relation between language and what it is about. Some of the specific causes of this quid pro quo have been mentioned above. Here I merely wish to repeat that what I claim to be Wittgenstein's motive is nonetheless admirable. If I am right he wanted to preserve the sound core of Frege's analysis, viz., the unity of thought, secured by senses, within the equally sound ontological framework erected by Russell. Furthermore, he hoped to secure the intentionality of thought. Unfortunately, since he labored under the burden of the truth-functionality thesis, the only recourse he had was to a fictitious relation (fictitious because of the kind I call unmediated) between the constituents of language as part of the world (words) and the constituents of (nonverbal) facts (things). The gambit proves fatal, if only because it adds impetus to his behavioristic propensities, solidifying them
as it were. The Investigations is in many ways merely an attempt to make the behaviorism intelligible, which it is not in the Tractatus. For, there it was hidden behind the entirely fictitious idea of a nonmediated meaning relation between language and the world, on the one hand, and, on the other, the implicit claim that in dealing with the relation one has done all that need be done about mind.

Both Frege and Wittgenstein fail; the former because of ontological extravagance (senses and truth values) and the latter because of ontological poverty (no mind). When speaking about the construction and interpretation of the ideal language Wittgenstein is right. When speaking about mind Frege, though not right, is more nearly right. Unhappily, everything Wittgenstein says about mind is moulded by what he says about language, whereas everything Frege says about language is moulded by what he says about mind. Not surprisingly, therefore, Wittgenstein ends in behaviorism; Frege, in a peculiar kind of idealism. To put the matter succinctly, neither Frege nor Wittgenstein fully appreciated that the analysis of language and the analysis of mind are two things and not one. Bergmann does appreciate that.

To understand Bergmann’s solution consider his transcription of A.

I: bel(a) • 'A*(a) • 'AXMA*.
'a' refers to an individual awareness; 'bel', to a character exemplified by a; 'A*', to a propositional character exemplified by a; and 'M', to a logical pseudo-predicate. Now for four comments.

1. Like Wittgenstein's, Bergmann's ontological schema is Russellian -- what exists is what is referred to by an undefined descriptive sign. None of the undefined signs of Bergmann's ideal language could by any stretch of the imagination be called a Fregean sense.

2. Bergmann's propositional characters (e.g., the referents of such signs as 'A*') are just that, viz., psychological characters, i.e., mental entities, and, thus, not nonmental Fregean senses. Moreover, they are simple characters.

3. 'M' refers to a logical pseudo-relation. It transcribes the English meaning of 'means' in its intentional use. That is, 'A*MA*' is expressed as follows: the thought that London is west of Berlin means that London is west of Berlin. This use of 'means' which quite adequately states the intentionality of thought is distinct from its use in "the sentence 'London is west of Berlin' means that London is west of Berlin". This latter use is transcribed behavioristically in the manner sketched in Grossmann's thesis. It is precisely at this point that Wittgenstein
failed, by failing to distinguish these two uses of 'mean'. One thing that may have contributed to his confusion is that both sentences and thoughts may be about what is not the case.

4. Since 'M' is a pseudo-relation, Bergmann gives up extentionality and, thus, truth-functionality. However, he does not give up the syntactical explication of analyticity. All M-sentences are analytic, i.e., either tautological or contradictory. Just as sentential tautologies are true in virtue of their truth table (i.e., their syntactical form), M-sentences are analytic in virtue of their syntactical form. In particular, an M-sentence is tautological if what occurs within the quotes is a token of the same type as what occurs after M.

Naturally, I have not undertaken a defense of Bergmann's solution. I have merely sketched it. So I merely notice that his solution, if otherwise defensible, escapes the difficulties of those of Frege and Wittgenstein. That he does escape them is due in large measure to his sharp distinction between language and thought, and, concomitantly, his distinguishing amongst the several ordinary uses of 'meaning'. Indeed, one may grasp Bergmann's solution by realizing that with Frege he accepts 'that p' as a name while with Wittgenstein he denies that 'p' is a name. That that can be done consistently is due to Bergmann's carefully distinguishing the meanings of 'meaning'.

I began this study by claiming that a careful examination of the Tractatus reveals the seeds of the Investigations. Furthermore, I endorsed Wittgenstein's claim that his later way of thinking (Investigations) can be seen in the right light only by contrast with and against the background of his earlier way of thinking (Tractatus). Indeed, the organization of this study was determined by those considerations. Thus far, I have concentrated on the structural connections and doctrinal similarities between the two. Accordingly, I will conclude by examining briefly a basic difference between them. That will be done by exhibiting two of Wittgenstein's motives for rejecting his earlier way of thinking.

In 1930 or thereabouts Wittgenstein made a dramatic move. He turned his back on the Tractatus, a work which he once believed to contain unassailable and definitive truths. Nevertheless, he did not lose sight of that work. On the one hand, he did not abandon the linguistic method of philosophy, i.e., the solving of philosophical problems by talking about talking; on the other, he retained many of the early
doctrines, e.g., behaviorism and the syntactical (grammatical) explication of analyticity. The essence of the move is that Wittgenstein now views language in what appears to be an entirely different way. In the Tractatus he viewed it as a picture in the sense that (some) words stand for things and their arrangement stands for the arrangement of things in facts. In the Investigations he views language as a tool for communication and, in particular, for manipulating the behavior of others.

Wittgenstein believes that these views clash. In this he is mistaken. The picture theory, at least as I explicated it, is presupposed by the use theory. In order to talk about the uses of language one must, at least implicitly, refer to the referents of the words. However, the ontologies which emerge as a result of doing (linguistic) philosophy in these different ways do clash. That is one cue for exploring Wittgenstein's rejection of the Tractatus. As I shall show shortly, his wish to make (S) 'This is red and green (all over...)' contradictory cannot be fulfilled within the ontological framework of the Tractatus; it can, though superficially, within that of the Investigations.

Another cue is the early Wittgenstein's attitude toward the picture theory. This theory is merely a misleading way of stating the fundamental feature of language: it is
about something and its syntactical features reflect what some philosophers have meant by the form of the world; i.e., the syntactical categories reflect the ontological categories. In other words, the picture theory is concerned with what language is about and how it manages (syntactically) to be about it. It is not concerned with how we learn and teach the use of language, nor with how we understand (in the psychological sense) assertions, nor again with how the meaning (referent) of a term (once learned) is carried or retained. Those are the concerns of the use theory, or, as I prefer to say, of the linguistic behaviorist. Of course, just as the linguistic behaviorist presupposes the picture (reference) theory, so too the ideal language philosopher (picture theorist) presupposes the use theory insofar as he takes ordinary language as his metalanguage. Wittgenstein, failing to distinguish the several uses of 'meaning', overlooked the fact that each theory treats different aspects; thus his belief that the two views of language clash. In the Tractatus the oversight is revealed by his thinking that the picture theory suffices for describing the subtleties of communication. In the Investigations the oversight is revealed by his obscuring (and perhaps disregarding) the referential feature of language. That is, Wittgenstein's later philosophy is an attempt to correct the early errors brought about
by his philosophical use of 'picture', 'image', and so on. He is, however, still intent upon solving the philosophical problems of his earlier period. His solutions are given exclusively in terms of the use theory since it is that which can account for communication, the focus of his later concern. Those solutions are holistic. That, as we shall see, is not surprising. For the moment though, I merely wish to reiterate that (i) the two "theories" of language are not in conflict, (ii) Wittgenstein believes that they are because he fails to distinguish the several meanings of 'meaning', and (iii) he opts for the use theory as his tool of analysis in an effort to secure certain holistic doctrines which cannot be secured by means of the picture theory.

The early Wittgenstein held that (a) there are simples, (b) the truth tables explicate analyticity, and (c) S is contradictory. (c) is compatible with (b) only if one denies that 'green' and 'red' name simples; i.e., that they are undefined. In other words, to hold (b) and (c), one must deny that the components of S are atomic. Wittgenstein saw that clearly, maintaining that color words are definable. However, the claim remains unsupported. Thus, he merely showed his awareness of the problem and not of a solution. The Tractatus is therefore incomplete.

In the 1929 paper he undertakes its completion, or, more
precisely, announces that it cannot be completed. He denies that color words are definable, thus acknowledging that (upon the view so far held) the components of $S$ are atomic. Nevertheless, he still wishes to hold (c). His choice is limited: he must either abandon (b) or argue that $S$ is in some sense ill-formed. Clinging to (b), he maintains that the truth table of $S$ contains but three lines, the "$TTT$" line being excluded, i.e., ill-formed. That is why I said that $S$ is in some sense ill-formed. For, in Wittgenstein's candidate for the ideal language $S$ is obviously well-formed. Be that as it may, Wittgenstein again leaves us with an unsupported assertion, a mere program. Once again he knows what he must hold but not the ground for holding it. Dialectically, it is forced upon him by his wish to hold (a), (b), (c), and the realization that 'red' and 'green' are indefinable. The program of 1929 is fanciful. Its significance for my argument is that it reveals his unshakable commitment to (c).

In *The Blue and the Brown Books* Wittgenstein rejects (a) and (b), the heart of the *Tractatus*. He does not reject (c). His rejection of (a) amounts to a rejection of the reference theory of meaning, namely, that the meaning (in one sense of meaning) of a (nonlogical) word is a thing. Or, to express the point otherwise, once again the reference theory
is rejected, (a) can be rejected. Or, again differently, at this point Wittgenstein embraces the idea that the meaning of every word is complex. This idea, implicit in the use theory, allows him to make a show of realizing (c). Since the meaning of a word is its use, or, more accurately, the grammatical rules for its use, he can argue that the rules for the use of 'red' and of 'green' prohibit S. That is, S is ill-formed and thus privileged. That the privileged (in this case the contradictory) and the meaningless are therefore identified does not bother Wittgenstein. As we saw in Chapter V, even in the Tractatus he identified them. However, Wittgenstein is reluctant to state explicitly the doctrine of "grammatical truth." The reason, I submit, is that it cannot be stated cogently unless the user of the language is introduced into the argument. A sentence is nonsensical and meaningless if and only if one who knows how to use the language would not assert it. Such blatant conventionalism has now become the price for making S contradictory. Wittgenstein pays the price, for it allows him to make a case for (c) being contradictory, something which he could not do in the Tractatus. However, he is too sensitive to pay the price openly.

Determined to hold (c), Wittgenstein then is forced to abandon both (a) and (b) and, thus, the reference theory.
Upon the latter, the color words must be indefinable. That is what he saw in 1929. But if they are indefinable, $S$ is not contradictory. Thus, if (c) is to be maintained, the indefinability of color words must go. Hence, the reference theory must go too. In the *Investigations*, sacrificing the reference theory, he elaborates the (holistic) doctrine that every word is definable.

Another and perhaps deeper motive, though one which acts in concert with the other, for rejecting the *Tractatus* is his concern with the problems of mind. As we saw, the early Wittgenstein, failing to appreciate the limits of the picture theory and the grammar of 'picture', believed that thinking is imaging. That belief was re-enforced by another, namely, that imaging accounts for how one speaks (thinks) about what is not the case. Moreover, those mistakes together with his commitment to the truth-functionality thesis forced him to maintain that there is a nonmediated meaning relation between world and language. (Remember: 5.542 - "A says p" is of the form "'$p$' says p". ) Wittgenstein eventually realized that this philosophy of mind was mistaken. However, rather than correct it by explicating the philosophical uses upon which it rests he attempted another and equally mistaken theory by attending to the phenomenology of language and linguistic behavior.
This explains why in his later phase his interest, unhappily, is almost exclusively psychological. He is intent upon elucidating how we mean by means of language, how we learn and teach it, and so on. That led him to the use theory. As far as it goes, that theory is not wrong. Only, it is no longer philosophy. Yet, Wittgenstein still believes himself to be concerned with philosophy. The solutions to the various philosophical problems which he proposes within the psychological theory are invariably holistic. For, as I indicated, the use theory amounts to a denial of simples in the sense that the user and his behavior in all contexts enter into the description of how he means in any context. Those holistic doctrines, such as, conspicuously, (c), are the very ones which he had embraced from the beginning. That is why I said that his eventual rejection of the Tractatus is less surprising than some believe it to be.

Wittgenstein's philosophical career may be summed up concisely as follows. He begins by philosophising about the world by means of language and ends by philosophising about language. That is why, from where I stand, that while he begins as a philosopher he ends as a psychologist. To say the same thing differently, he begins with the reference theory and ends with the use theory. The latter, improperly employed as a tool for philosophical analysis, leads to
holism. Holism and atomism are incompatible of course. The 
*Tractatus* while explicitly atomistic, is implicitly holistic. 
Abandoning the reference theory and with it, unhappily, 
philosophy, the *Investigations* permits this holism to express 
itself explicitly. In a sense, therefore, there is no break 
between the *Tractatus* and the *Investigations*. 
FOOTNOTES

Chapter I

1. /8/, x.
2. /6/, x.
3. /7/, 4.1121.
4. /22/.
5. /21/.
6. /9/.
7. /8/.
8. /1/.

Chapter II

1. /8/, Part I, Secs. 197-242; in particular 224.
2. /8/, Part I, Sec. 43.
3. /8/, Part I, Sec. 124.
4. /8/, Part I, Sec. 19.
5. cf. /16/.
6. cf. /12/ for an analysis of this issue.
7. cf. /2/ and /3/.
8. /3/, "The Revolt Against Logical Atomism."
Chapter III

1. /8/, Part I, Sec. 307.
2. /8/, Part I, Sec. 305.
3. /8/, Part I, Sec. 244.
4. cf. /20/, Lectures II and III.

Chapter IV

1. Probably a more accurate interpretation of Frege is that a sense is exemplified by either the True or the False.

Chapter V

1. cf. /13/.

Chapter VI

1. /1/ and /17/.
2. The pointing metaphor rests on this "unity." Thus, it lends supports to the nominalist's belief that the colored spot is an individual, for upon one use of 'point', only individuals can be pointed at.
3. cf. /12/.
4. /1/, p. 110.
5. /1/, p. 109.
6. cf. /14/.
7. /1/, p. 107.
8. cf. /19/.
14. The thesis of elementarism states that all undefined signs are of the zero-type or first-type.

15. Actually, if one puts the "forms" into the signs, 'This is red and green' becomes ill-formed and not contradictory. But, then, Wittgenstein did not appreciate the differences between these categories. For an analysis of this issue see /10/.

16. /1/, p. 109. Quoted from Wittgenstein's pre-Tractatus Notebooks.

Chapter VII

11. /1/, pp. 27-29.
2. /21/, p. 164.
3. /1/, pp. 27-28.
4. /9/, p. 3.
5. /9/, pp. 3-4.
6. /9/, p. 4.
7. /9/, p. 31. cf. also /8/, Part I, Secs. 23-80.
8. /1/, p. 90.
9. /3/, "Intentionality."
10. /5/, Chapter V.
11. /22/, p. 234.
13. cf. /11/.
14. cf. /2/, "Bodies, Minds, and Acts"; /3/, "Intentionality"; and /15/.

Chapter VIII

1. /8/, p. x.
2. /7/, p. 29.
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