

U N I V E R S I T Y O F S O U T H A M P T O N

THE SEARCH FOR A THEORY OF MEANING

by Elizabeth U. El-Dars

UNIVERSITY OF SOUTHAMPTON

ABSTRACT

FACULTY OF ARTS
PHILOSOPHY
Master of Philosophy

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Language and the theory of meaning have become the central concern of philosophy mainly because of the work that has been initiated at the turn of this century by Frege. He was the first to draw attention to the role that language plays in stating philosophical problems. Since then, many attempts have been made to offer a systematic account of the workings of language in the form of a theory of meaning. Among them, Frege's Russell's and Wittgenstein's theories occupy the most prominent places.

Frege thought that his doctrine of sense and reference could explain many of the puzzling features of language. Russell however criticized Frege's notion of sense as not only confusing, but also as completely useless to the theory of meaning. Wittgenstein offered a picture theory of language in the Tractatus, but later he rejected his earlier views and abandoned the search for a theoretical explanation of how language functions. In recent years, Donald Davidson suggested a new way of theorizing about language and meaning which seemed to many to avoid the difficulties which the previous theories engendered. However, some of these unsolved difficulties have continued to generate problems for his theory too.

In my search for a competent theory of meaning I have examined the most prominent views about language which were put forward in this century. I came to the conclusion that although we seek for theoretical explanations none which has been offered so far is completely satisfactory.

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I. INTRODUCTION

1. Strategy.

This work examines some of the problems which arise in connection with the numerous attempts that have been made in the twentieth century philosophy to illuminate the nature of meaning. Although the problems are not new: how language functions has always been a subject of philosophical concern, nevertheless, the attempt to offer a systematic account of its working in a form of a theory of meaning has only in this century become thought of as the central concern of philosophy. Gilbert Ryle, for example, in an article he wrote in 1957, entitled 'The Theory of Meaning', could describe this preoccupation with the theory of meaning as 'the occupational disease of twentieth century Anglo-Saxon and Austrian philosophy.' While in more recent times Michael Dummett has sought to persuade philosophers that the shift from the theory of knowledge as First Philosophy, achieved by Descartes in the seventeenth century, to the theory of language as First Philosophy, not only was originated by Frege but it also must be regarded as his greatest contribution to contemporary philosophy:

Frege's philosophical logic, while rooted in his discovery of quantification, the deepest single technical advance ever made in logic, came at just the time when logic was to replace epistemology as the starting point of philosophy. Although the recognition came too late for Frege to be aware of it, it is thus not surprising that his work should by now have come to be seen as of central importance to contemporary philosophy.

(M.Dummett, 1973, XXXIII)

However, even if one were to agree that this was Frege's

greatest achievement, it still remains an open question as to whether the theory of meaning that Frege himself offered is satisfactory. Dummett himself takes the distinction between sense and reference, a distinction which enters Frege's philosophy at quite a late date, to be fundamental. But the distinction between sense and reference which Frege drew has, by no means, received universal assent. As early as 1905, it was taken to task by Russell in his article 'On Denoting', and in Wittgenstein's later work we are encouraged not to ask for the meaning of a word at all but for its use. So, although it may be true that the theory of meaning has become the central concern of philosophers in the twentieth century, it is equally true that there is no consensus as to what shape it should take.

In more recent years, Donald Davidson has proposed a new way of looking at meaning which seemed to many to open a way out of the impasse. By postulating that a theory of truth along the lines of the theory proposed by the Polish logician Alfred Tarski can do duty as a theory of meaning Davidson claims to offer a way of talking about meaning which avoids the difficulties that earlier theories engendered.

Davidson's claims have shaped the structure of my research, for in order to understand his programme, and assess the value of his novel approach to the studies of language and meaning, I had to refer to the earlier theories whose deficiencies it was designed to overcome. The most prominent among those theories is the work of Frege whose doctrines, undoubtedly, have to serve as the starting point for anyone interested in the philosophy of language. Not only was he responsible for inventing the logical apparatus of the propositional calculus and the predicate calculus which continues to be thought of as an indispensable tool for the analysis of language, but also, his philosophical reflections on the nature of this

logical apparatus have provided the basis for a great deal of subsequent theorising. For instance, his distinction between Sinn and Bedeutung, usually translated into English as 'sense' and 'reference', had the effect of drawing attention to the insufficiency of reference alone for the explanation of meaning, while one way of characterising the work of Davidson is to describe it as a large scale account of why this distinction is not required.

There can be no doubt that despite all the work that has been done in this century by the philosophers whose understanding of the philosophical problems which language generates contributed to and shaped modern philosophy, Frege's work still provides the framework within which many of the most persisting problems are discussed. The fact that nearly a hundred years divides Frege's work from the latest proposals put forward by Davidson is a proof of how important these problems remain.

In this chapter I shall single out some of the general issues which unify the most important discussions about language, while chapters 2-6 will be devoted to the theories of Frege, Russell, Wittgenstein and Davidson which have provided the framework within which the particular problems of language are discussed. Many other attempts have been made in this century to explain some particular problems of language. Nevertheless, Frege's, Russell's, Wittgenstein's and Davidson's proposals deserve to be singled out as the most complete attempts to account for the nature of language and meaning.

In Chapter 7 I shall discuss one part of language which attracted a great deal of attention from the philosophers. In contrast to the previous chapters where I discuss various issues against the background of one particular theory, in Chapter 7, I shall discuss the

problems generated by sentences in reported speech as a very good test of the adequacy of the various proposals.

2.The Problems.

In England, it was Russell who, at the turn of the twentieth century, drew attention to the imprecision of ordinary language and the problems which it generates. Like Frege, Russell was aware of the need for more precise forms of linguistic expressions through his work in the field of mathematics and logic. His early work is very much concerned with the task of showing that all mathematical formulae can be derived from logic. It is sometimes thought that he spent several years of his life re-inventing work that Frege had already done before him. This claim seems to be confirmed by Russell's own remarks in his Autobiography where he wrote as regards Cantor's Mannichtfaltigkeitslehre and Frege's Begriffsschrift:

These two books at last gave me the gist of what I wanted, but in the case of Frege I possessed the book for years before I could make out what it meant.

Indeed, I did not understand it until I had myself independently discovered most of what it contained.

(Russell, 1967, p.68)

However, even if one were to disagree with this claim, there can be little doubt that it was because of Russell's work that Frege's views became influential in English-speaking philosophy.

Among the great number of the ideas which influenced the development of the philosophical thought of this century, Frege's context principle came to be most widely accepted. The principle appeared for the first time in the Introduction to The Foundations of Arithmetic in which Frege attempted to show that mathematical inferences are based on the general laws of logic. It is one of the three principles which Frege singled out as the guiding

rules for his inquiry. The first principle: 'always to separate sharply the psychological from the logical, the subjective from the objective' is an expression of Frege's aim to 'depsychologize' logic, i.e. to show that psychological considerations are irrelevant to logic. It is the second principle : 'never to ask for the meaning of the word in isolation but only in the context of a proposition' that became known as the context principle. It is followed by Frege's third resolution, i.e. never to lose sight of the distinction between concept and object.

The role of the context principle in Frege's later work is still a subject of dispute. For instance, Dummett implies that the principle was made redundant by a later distinction between sense and reference:

...Frege says, a name, or any other word, has meaning only in the context of a sentence, and it is only in that context that we may ask after its meaning.

The word here translated by 'meaning' is 'Bedeutung', but Frege had not yet formulated his distinction between reference (Bedeutung) and sense (Sinn), and he never repeated the dictum after the distinction had been formulated.' (Dummett, 1973, p.495)

Despite the controversy, both, about the value of the principle and Frege's later attitude towards it, the principle exerted a great deal of influence on later philosophers. Wittgenstein, for example, explicitly refers to it in his Tractatus and I shall argue in Chapter 5, that the principle also underlies the conception of philosophy developed in his Philosophical Investigations. In more recent times, Davidson also refers to the principle in his paper 'Truth and Meaning' where he makes use of Frege's dictum to bring out the holistic idea of meaning:

Frege said that only in the context of a sentence does a word have meaning; in the same vein he might have added that only in the context of the

language does a sentence (and therefore a word)
have meaning. (Davidson, 1967, p.22)

It seems that the context principle was one of Frege's most influential ideas which has left its mark on all the important views about language which I discuss in this thesis. I shall examine it in chapters 4-6 as the unifying theme in the discussions of Frege, Wittgenstein and Russell. I shall argue that the role which Frege's principle plays in both the early and later writings of Wittgenstein can be regarded as different from its role in Davidson's proposal only in the scope of its application.

The context principle and the distinction between sense and reference constitute only a part of Frege's philosophy of language. There can, however, be little doubt that they left a distinctive mark on the theories of language which have been put forward in this century. It is because of their continuing influence they will be discussed in this thesis as the basis from which later views about meaning developed.

Frege's achievements in the theory of language can be said to be the result of his investigations into the foundations of mathematics, for he spent most of his life trying to establish that mathematics can be derived from logic. He had hoped to demonstrate that arithmetic could be reduced to self-evident logical principles. It, therefore, came to him as a serious blow when Russell published The Principles of Mathematics in which he showed that one of his supposedly self-evident logic axioms is, in fact, contradictory.

The existence of contradictions, or paradoxes, such as that of Epimenides, the Cretan who said that all Cretans were liars, had been known for a long time. They were, however, regarded as mere curiosities, or puzzles of language. It was not until Russell's discovery that they became of great concern to the philosophers and the

logicians who realized that their existence was a threat to the consistency of logical and semantic theories. For Frege, Russell's discovery was particularly disastrous for it hit the foundations of his whole system of logic at the time of completion of his work Fundamental Laws of Arithmetic.

The uncovered paradox, which became known as 'Russell's paradox', showed that Frege's system contains an inconsistency generated by the notion of a class, specified by Axiom V. (Frege, 1893, pp.36,240) The axiom, which first appeared in 'Function and Concept', referred to Frege's law about 'graphs' and implied that equality can hold generally between values of functions. The difficulty was shown to inhere in the notion of a non-self-membered class, i.e. a class which is not the member of itself. Russell pointed out that while some sets are members of themselves, others are not. For instance, a class of abstract objects is itself an abstract object, although a class of men is not itself a man. This argument contains a contradiction. For if we now ask of the class of classes that do not belong to themselves whether or not it is a member of itself, we get a contradictory answer, i.e. that if it is, it is not, and if it is not, it is. This shows that the logical system which Frege devised in order to show that mathematical statements can be derived from a set of self-evident principles of logic is not consistent. Although Frege made an attempt to eliminate the contradiction, he realized that the foundations of the most important work of his life were seriously damaged:

Hardly anything more unfortunate can befall a scientific writer than to have one of the foundations of his edifice shaken after the work is finished. This was the position I was placed in by a letter of Mr. Bertrand Russell, just when the printing of this volume was nearing its completion.

(Frege, 1893, vol.II, Appendix, p.253)

It is obvious that the value of Frege's work does not consist merely in his attempt to establish that arithmetic can be given a logical foundation. His achievements cannot be judged by his, as he thought, failure to fulfil the task which he had set for himself. However, he was right in thinking that the inconsistency in his proposal put into question whether arithmetic can possibly be given a logical foundation at all.

In The Principles of Mathematics, Russell had not only identified the inherent contradiction in Frege's system but, aiming, like Frege, to show 'that mathematics and logic are identical', he also proposed a way to remove the threat which the existence of the paradoxes posed to this project. The formal solution, the theory of types was further developed in his article 'Mathematical Logic as Based on the Theory of Types' and was given its full version in Principia Mathematica.

Russell did not recognize that the paradoxes can be classified into two distinctive groups: one which involves the concept of class, the other involving the semantic concept of truth. His philosophical explanation implies that the paradoxical sentences are the result of one fallacy, the violation of the 'vicious circle principle'.

Russell's simple theory of types divides the universe of discourse into a hierarchy of individuals, sets of individuals, sets of sets of individuals, ...etc. as type 0, type 1, type 2, ...etc. and the corresponding variables with a type index, e.g. x ranges over type 0, x ranges over type 1 ...etc. It is then stipulated that an expression of the form " $x y$ " is well-formed only if the type index of ' y ' is one higher than that of ' x '.

The ramified theory of types, which it has now become customary to distinguish from the simple theory of types, imposes a hierarchy of orders of propositions (closed sentences) and propositional functions (open sentences)

together with the restriction that a propositional function can contain a quantifier which only ranges over a proposition, or a propositional function, of the lower order than itself.

Russell's hierarchy of types prevents the formulation of paradoxical statements by putting restriction on what can count as a well-formed expression. Thus, the property of not being a member of itself and the sentence which says of itself that it is not true, become inexpressible, if the hierarchy of types, and type-index is observed. However, because of its complexity, and because it also blocked certain inferences concerning the proof of the infinity of natural numbers which, in turn, forced Russell to introduce other axioms, the theory of types has now been largely abandoned. His philosophical solution, which blamed the violation of the 'vicious circle principle' for all the paradoxical statements, has also been criticised. For instance, Susan Haack believes that the vicious circle principle was stated 'without the precision which might be desired'. (S. Haack, 1978, p.142) She also points out that it is not always clear what, exactly, is wrong with the violation of the principle. Haack quotes Ramsey as saying that he can see nothing objectionable about describing a man as the one with, say, the highest batting average of his team, which, according to Russell's specification, violates the vicious circle principle. Ramsey does not think that all the circles which Russell's principle rules out, can be regarded as truly vicious. (Haack, 1978, p.142)

Following Russell's discovery, the paradoxes have continued to stimulate the most important developments in mathematical and philosophical logic in this century. For instance, Tarski's hierarchy of languages, and most of all, Ryle's notion of a category mistake, were proposed as answers to the paradoxes. It became quite obvious that their existence cannot be ignored by any competent

logical or semantic theory. Therefore, it is very disquieting that Davidson, whose theory of meaning will be discussed in Chapter 6, has nothing to offer as an explanation. His decision to carry on with his programme without 'having disinfected this source of conceptual anxiety' has been particularly disappointing. Davidson's proposal carried a promise of an uncompromising new approach to the problems of meaning. However, by leaving a large portion of language outside the scope of his theory, Davidson contradicts one of the fundamental requirements of his theory, i.e. that it applies to the whole language. I shall argue that inability to deal with paradoxes is a serious defect in Davidson's theory which raises a question about the plausibility of his whole project.

Both Russell and Frege became aware of the importance of a correct understanding of the workings of language as a result of the investigations into the nature of numbers and mathematical statements. Their work in this field made them both sceptical about the adequacy of natural languages as instruments for philosophical investigation. They thought that no natural language was sufficiently precise and rigorous for the analysis of mathematical statements and logical proofs. Russell came to the conclusion that the lack of precision and the ambiguity of language were responsible for many ill-conceived philosophical problems. These problems, he thought, could be resolved if they were restated in a language that showed clearly its true logical form. This belief led Russell to postulate certain conditions which a logically perfect language would have to fulfil to avoid the mistakes caused by the imprecise expressions of ordinary language. A similar view had made Frege seek a remedy in the form of a notation which would show precisely what mathematical statements stated and arithmetical proofs consisted in.

Russell became preoccupied with the possibility of a logically ideal language and undertook its construction. In the second lecture on 'The Philosophy of Logical Atomism' he described such a language as being completely analytic, i.e. a language in which there is one word only for every simple object and everything that is not simple can be expressed by a combination of words. Later on, in the Introduction to Wittgenstein's Tractatus, he expanded this view by adding, that since the whole function of language is to have meaning, this function is fulfilled 'in proportion as it approached to the ideal language'.

There is obviously a great similarity between Russell's and Frege's distrust for natural languages and their views concerning the need for more precise forms of linguistic expressions. The similarity is restricted, however, only to the idea of a logically correct or 'ideal' language, for it stemmed from different views about language and gave rise to different assumptions from which their further doctrines on language and meaning developed. For instance, Frege believed that the meaning of a name could not consist in it having a reference only, while Russell thought that the meaning of a name had to be identified with the object it denoted. Consequently, it is not only the case that Russell did not accept Frege's distinction between sense and reference but also that he put different requirements from those of Frege on what counts as a proper name. He had to explain the nature of the expressions which can occur as the grammatical subjects of propositions but which, nonetheless, do not refer to anything particular in the world. His theory of descriptions, which will be discussed later, was design to explain the logical status of such expressions.

Russell's views on language and meaning changed and developed throughout his life and the problem with what was to count as a proper name created particularly great

difficulties for him. Nevertheless, some of his important assumptions, e.g. the identification of the meaning of a name with the object it denotes, and the view that an expression which fails to denote anything does not function as a name, remained unchanged.

In the chapter on Russell's theory of meaning, I shall be concerned mainly with the views which he held for a relatively brief period, i.e. the views which he expressed in 'On Denoting' and in the series of lectures on 'The Philosophy of Logical Atomism'. As some of them are the result of Russell's objections against his own earlier convictions, the earlier views - mainly those which he expressed in The Principles of Mathematics, will be discussed as the basis of his later arguments.

There is no doubt that Frege's was a pioneering work in philosophical logic and his and Russell's own contribution to the philosophy of language helped to alter the centre of gravity of philosophy. But it is believed that the final reinstatement of philosophical logic as the foundation of philosophy must be regarded as the achievement of Ludwig Wittgenstein.

Wittgenstein, like Russell and Frege, saw the importance of language with regard to philosophical problems. However, unlike Russell and Frege who believed that many of these problems were created by the imprecisions and misleading forms of linguistic expressions, Wittgenstein was reluctant to put the blame on language itself. In fact, he believed that all the propositions of everyday language are in perfect logical order (Wittgenstein, T.5.5563) He thought that philosophical mistakes and confusion are caused by our lack of understanding of the logic of language, and how it works, rather than the inherent imperfections of language itself. Nevertheless, he shared Russell's and Frege's view that the true, logical form of a proposition is often concealed by ordinary language and attributed to Russell

the 'service of showing that the apparent logical form of a proposition need not be its real one.'(Wittgenstein, T.4.0031) This view led him to see the main task of philosophy as that of revealing the true logical form of language. One can say that in recent times, the task of uncovering the 'logical grammar' of language has been undertaken by Davidson and it earned him the title of 'neo-Wittgensteinian'.

Although Wittgenstein shared Russell's interest in language, and despite the supposed influence which they had on each other's views during their 'logical atomist' periods, he and Russell had quite different things to say about language and the meaning of linguistic expressions. Although they both thought that the study of language had to occupy a central position in philosophy, they differed considerably in their evaluation of ordinary language for logical and philosophical investigations and the problems it presented to philosophers. This discrepancy may seem at first trivial; nevertheless, it lead Wittgenstein away from Russell's preoccupation with an ideal language towards more general problems of symbolic representation.

During their 'atomist' period, both, Russell and Wittgenstein were concerned with the theory of symbolism. In the first lecture on the philosophy of Logical Atomism Russell argued that 'unless you are fairly aware of the relation of the symbol to what it symbolizes, you will find yourself attributing to the thing properties which only belong to the symbols'. (Russell, 1918, p.185) While Russell worried about the logically misleading grammatical forms of expressions which he thought were the result of the imperfection of our language, Wittgenstein dealt with the cause of confusion on a much grander scale. His attention was focussed on the various relations between signs and symbols, and he blamed the lack of a proper understanding

of these relations and how signs are used, for giving rise to the most fundamental philosophical fallacies (Wittgenstein, T.3.323-3.324) For Wittgenstein, the fact that two signs with different modes of signification can be used in an apparently similar way, or that one sign can be common to different symbols, e.g. 'is' can occur in a proposition as the copula, a sign of identity or a sign for existence, does not mean that there is anything wrong with the sign itself, or with the proposition in which the sign is employed. What is wrong and confusing is our lack of awareness that this is how signs can be used.

Wittgenstein accepted Russell's theory of descriptions and Frege's requirement that sense should be determinate. They were necessary to support his belief that the structure of ordinary language is in good logical order, although he agreed with his predecessors, philosophical analysis may be needed in order to reveal it. The reason for Wittgenstein's approval of Russell's theory of descriptions and Frege's condition was that for ordinary language to be 'alright as it is', there could be no truth - value gaps in it; it should always be possible to determine whether a proposition is true or false. While Frege's condition specifies this requirement, Russell's theory shows how to eliminate from language the troublesome expressions which do not seem to refer to any specific entities.

The belief that 'a proposition must restrict reality to two alternatives, yes and no' is one of the leading ideas behind the picture theory of meaning proposed in the Tractatus. In the Notes dictated to G.E. Moore in Norway, Wittgenstein said :

...to have meaning means to be true or false: the being true or false actually constitutes the relation of the proposition to reality which we mean by saying that it has meaning (Sinn).
(Wittgenstein, Notebooks 1914-1916, p.113)

By comparing a proposition with reality, with what actually is, an existing state of affairs, we must be able to determine whether a proposition is true or false. It does not mean that we have to know the truth value of a proposition in order to understand it, but it means that it should always be possible to establish whether a given proposition agrees with the existing state of affairs or not. This view has lead Wittgenstein to dismiss many pseudo - propositions as non-sensical, and to include among them all propositions of philosophy which are incapable of such verification. At the end of the Tractatus he argued that the correct method in philosophy is 'to say nothing except what can be said, i.e. propositions of natural science - i.e. something that has nothing to do with philosophy...' (Wittgenstein, T.6.53)

Wittgenstein, like Frege and Russell, believed that we could grasp the meaning of a proposition if we understood its constituents:

Like Frege and Russell I construe a proposition as a function of the expressions contained in it.

(Wittgenstein, T.3.318)

This means that a proposition must be essentially composite. Propositions, according to Wittgenstein, are verbal complexes; molecular propositions are composed truth - functionally out of atomic propositions and these, in turn, consist of words arranged in such a way that the whole group - 'like a tableau vivant' - presents a state of affairs. (Wittgenstein, T.4.0311) A proposition is true if it mirrors the arrangement of simples in the world; if the arrangement of the symbols in a proposition does not correspond to the arrangement of the simples in the world than the proposition is false.

Russell made similar statements in his lectures on the philosophy of Logical Atomism and came very close, indeed, to Wittgenstein's idea of picturing as a form of representation. Speaking about a certain identity of

structure between a fact and a symbol, Russell maintained that 'there is an objective complexity in the world which is mirrored by the complexity of propositions'. (Russell, 1918, p.197) It seems pointless, however, to argue the amount of influence Wittgenstein and Russell had on each other's views during their 'logical atomist' period. For although on many occasions, (e.g. in the Preface to the first published version of the lectures on the 'Philosophy of Logical Atomism') Russell acknowledges his debt to the ideas of Wittgenstein, it can also be argued that his statements do not necessarily settle the question of influence. Sainsbury has pointed out that it is not clear at all to which ideas of Wittgenstein's Russell refers:

Russell's theory of names and descriptions, his view that existence is not a predicate, his principle of acquaintance: all these are found not only in the 'Philosophy of Logical Atomism' but also in earlier writings, like 'On Denoting', Principia Mathematica, 'Knowledge by Acquaintance and Knowledge by Description' and The Problems of Philosophy, produced before he had met Wittgenstein, or at any rate, before there is any reason to think that Wittgenstein was a philosophical influence.

(M.Sainsbury, 1979, p.11)

I agree with Sainsbury that the questions of the amount of influence Wittgenstein and Russell had on each other is of no essential philosophical significance. The fact is that although the traces of their common beliefs and discussions can be found in Russell's lectures on Atomism, what could have been originally thought of as the similar ideas stemming from the shared concern with language, were radically transformed in Wittgenstein's Tractatus. His perspective on language and meaning which he unfolded in the Tractatus reached far beyond the scope of Russell's ideas about language. Some even suggest that

it is misleading altogether to think about Wittgenstein's Tractatus from the perspective of logical atomism. I shall argue that although it is possible to interpret Wittgenstein's views from a different perspective, e.g. that of the implications which follow from the employment of the context principle in his theory of propositions, it is also true that the traditional interpretation has been implied by many of Wittgenstein's own remarks.

There are, of course, many differences between Russell's and Wittgenstein's views, even if, in accordance with the traditional interpretation, we ascribe to Wittgenstein the doctrines of atomism. For instance, Russell supplemented his version of logical atomism with the epistemological theory which postulates that the logical atoms of analysis are sense - data, i.e. the objects of direct acquaintance. This could be regarded as an expression of the influence of the British tradition of empiricism much evident in Russell's work - an influence which has been discussed in detail by David Pears. (D.Pears, 1976) Wittgenstein was more successful than Russell in breaking away from the Cartesian tradition in philosophy which placed much stress on the theory of knowledge. His views in the Tractatus lack such epistemological explanations, although their absence does not make any difference to his theory.

A much more fundamental difference between Russell's and Wittgenstein's views shows itself in their different interpretation of the logical form of sentences containing verbs to which Russell referred as expressions of 'propositional attitudes'. These verbs were already recognized by Frege as creating 'oblique contexts' in which the subordinate part of a sentence does not refer in its usual way. In order to preserve the truth-functional analysis of language, Frege suggested that sentences in oblique contexts refer 'indirectly'. (Frege, 1892, p.37) Russell, who also recognized the

importance of the problem, could not accept Frege's solution. However, he found it difficult to give a more satisfactory account of the sentences containing verbs of 'propositional attitudes'. Despite the desperate attempts to understand the logical form of a belief and a proposition which expresses it, he could not say anything except that the logical form of believing differs from the logical form of perception. (Russell, 1918, pp.216-228)

Wittgenstein dismissed the whole problem as wrongly conceived. He thought that it only looks as if it were possible for one proposition to occur in another in a way which could not be truth-functionally analysed. (Wittgenstein, T.5.541) He strongly believed that every meaningful proposition must be the result of truth - operations on elementary propositions. (Wittgenstein, T.5.3) Therefore, he thought, the difficulty which Russell encountered when trying to explain the logical structure of sentences containing verbs of 'propositional attitudes', e.g. 'A believes that p is the case', could only be caused by his misunderstanding of their real logical form :

For if these are considered superficially, it looks as if the proposition p stood in some kind of relation to an object A. (Wittgenstein, T.5.541)

Wittgenstein argued that the propositions containing verbs of propositional attitudes, as in 'A believes that p', do not indicate some kind of relation between an object and a proposition, as implied by Russell's attempted analysis. He took Russell's analysis to task for failing to show that what Othello believed, i.e. that Desdemona loves Cassio, cannot be a piece of nonsense. He dismissed Russell's view that the verbs of propositional attitudes function logically as proper verbs and regarded sentences containing them as pseudo-propositions. He suggested that the logical form of the grammatically compound sentences containing 'psychological' verbs, such

as 'believes', 'thinks', etc., is '"p" says p' (Wittgenstein, T.5.542).

Russell's attempt to analyse compound sentences containing verbs of propositional attitudes can be thought of as an attempt to preserve the logical status of both verbs. Wittgenstein, on the other hand, denies the logical status of the 'psychological' verbs, i.e. 'believes', 'thinks', 'says', etc. and thinks that only a proposition p in 'A believes that p', can be the object of a correct analysis. Following the same idea, one can now think of Davidson's latest proposal, regarding the analysis of sentences in indirect speech, as a reversal of Wittgenstein's argument. Davidson proposed to analyse sentences containing verbs of propositional attitudes as made up of an expression referring to a speaker, a two-place predicate and a demonstrative referring to an utterance. Thus, he can now suggest that a proposition which follows the demonstrative, and which on Wittgenstein's analysis was the only one that counted, refers only to the content of of the subject's saying and has no logical or semantic connection with the original attribution of saying, thinking or believing:

...from a semantic point of view, the content-sentence in indirect discourse is not contained in the sentence whose truth counts, i.e. the sentence that ends with 'that'. (Davidson, 1968, p.106)

I shall return later to the problems which the sentences containing verbs of propositional attitudes have presented. Here, I have intended to show only that although there is no consensus among the philosophers regarding the correct interpretation of logical form of sentences containing verbs of propositional attitudes, they all recognized that, unless a right explanation is found, they will continue to pose a threat to the truth-functional analysis of language.

Language has always mattered to philosophy, but it was Frege who first recognized many of the problems which have become the subject of the most important discussions about language and meaning in this century. Thus, Frege's context principle not only influenced the views which Wittgenstein held in the Tractatus and later, in the Philosophical Investigations, but also it was used by Davidson in his recent proposal. Russell shared Frege's concern with the imprecision of ordinary language but many of his arguments were directed against Frege's views. His theory of types was proposed as a remedy for the contradiction discovered in Frege's system of logic while Davidson's lack of response to this most challenging problem may yet undermine the credibility of his whole theory. Frege recognized also the importance of a correct analysis of the molecular sentences containing two, or more verbs. But Russell, Wittgenstein and Davidson have offered quite different explanations of their logical status.

Frege's context principle, the problem of paradoxes and the various attempts to deal with the logical form of reported speech, form the structure of my thesis; they are the unifying themes in the theories of language which I shall discuss in the following chapters. However, I have found no consensus with regard to any of these problems, in spite of the general agreement as to their importance. During the course of my research I have reached the conclusion that none of the proposed theories of meaning is completely acceptable. Russell's criticism of Frege's proposed answer to the insufficiency of reference alone in the explanation of meaning is well known. Wittgenstein himself rejected the theory which he first proposed in the Tractatus and towards the end of his life suggested a new way of inquiring after meaning. In the Philosophical Investigations he dispensed with theory-building altogether and proposed instead to look at

how language is used.

When some years ago I came for the first time across Davidson's work, I became influenced by his new approach to the theory of meaning and the enthusiasm with which he attacked the 'old issues'. Davidson seemed to be very much aware of the mistakes of his predecessors and was determined to avoid them. It was disappointing to find that in his determination to make his theory work he chose to ignore the problems to which his theory cannot be applied.

In the concluding chapter of my thesis, I shall return to some of Wittgenstein's views argued in the Philosophical Investigations, for the insight which he presented there is close to the view I reached at the end of my search for a satisfactory theory of meaning. I slowly came to believe that the complexity of language cannot be captured by the requirements of any theory which the philosophers of language conceived as 'the theory of meaning'. If, however, theorizing is the only possible means to systematize our thinking about language, then I cannot think of a better way to summarize my conclusions than to quote the expression used by Schiffer. (S.Schiffer, 1987, p.265) The 'No-Theory Theory of Meaning' seems the best title for my concluding chapter.

II. GOTTLOB FREGE'S THEORY OF MEANING

1. Frege's Task.

Much of what can be regarded as Frege's theory of meaning has remained for almost a century at the centre of philosophical studies of language. His ideas shaped and influenced most twentieth century theories of language. Although it is no longer possible to agree with everything he said, his account of the workings of language, and the problems which he identified, must be regarded as the starting point for anybody concerned with language and how it functions. In this chapter, I shall present Frege's views on meaning in so far as it was his views that generated the problems which later became central in discussions of meaning.

Frege's achievements in philosophical logic were the result of his work as a mathematician. During the course of his investigations into the nature of numbers and mathematical formulae Frege realized that some of the most fundamental concepts which were used to express mathematical statements had not been clearly defined; even the concept of number itself was not at all clear:

The fact is, surely, that if a concept fundamental to a mighty science gives rise to difficulties, it is an imperative task to investigate it more closely until those difficulties are overcome; especially as we shall hardly succeed in finally clearing up negative numbers, or fractional or complex numbers, so long as our insight into the foundation of the whole structure of arithmetic is still defective. (Frege, 1884, II)

The Foundations of Arithmetic published in 1884 marks the beginning of Frege's life-long work aimed to establish that the laws of arithmetic are analytic judgements and

consequently a priori. The 'imperative task' which Frege had set for himself was to show that arithmetic can be regarded as a development of logic and all arithmetical propositions as deducible solely from logical laws:

The present work will serve to show that even inferences which on the face of it are peculiar to mathematics, such as that from 'n' to 'n+1', are based on the general laws of logic. (Frege, 1884, IV.)

Frege spent most of his life developing and perfecting the system of logic which he had first sketched in The Foundations of Arithmetic. It was not, however, until the publication of the first volume of The Basic Laws of Arithmetic in 1893 that he saw himself approaching the completion of this task.

Frege's work in the field of logic and arithmetic made him develop some views about language and meaning which he presented in a series of articles published between 1891 and 1904. However, his concern with language and its importance in philosophical investigations, is much evident in all his work. At the outset of his career he came to believe that any thorough investigations of the philosophical problems of logic must begin with 'clearing the ground' of any psychological influences which had penetrated into the field of logic and philosophy. He also realized early that the expressions of ordinary language were not sufficiently precise to carry the rigorous proofs needed to accomplish his task.

A few years before the publication of The Foundation of Arithmetic, Frege had already thought of a formal language in which all mathematical proofs could be safely carried out. The invention of Begriffsschrift, or the concept-writing is considered as Frege's greatest achievement. Although some attempts to attain rigour in mathematical reasoning had been made previously, the earlier systems, such as Boole's, were insufficiently

complete for this purpose. Frege's invention was the first adequate formal language which could be successfully used for the expression of mathematical statements; it inaugurated, as Quine pointed out, the era of modern logic whose progress had been previously hindered by the lack of sufficiently rigorous means to deal with the broad spectrum of logical problems. (W.V.O. Quine, 1960)

Frege's insight into the structure of propositions became a key to the analysis of language and his invention of the theory of quantification provided logicians with means that facilitated development of modern logic. Michael Dummett has singled out the problem of inferences involving multiple generality as the most notorious among the difficulties that had hindered progress in logic and had made the whole subject fall into disrepute over the centuries. Frege's discovery of the quantifier-variable notation provided means by which it was possible 'to resolve for the first time in the whole history of logic, the problem which had foiled the most penetrating minds that had given attention to the subject'. (Dummett, 1973, p.8)

Frege became aware of the fact that in natural language, the grammatical form of a sentence is often misleading; that the linear arrangement of signs out of which a sentence is constructed does not always coincide with the order of its construction. This, he thought, was the reason why the analysis of some sentences, e.g. 'Everybody desires something', presented such problems to the logicians. Because of its grammatical appearance, it was thought that a sentence containing multiple generality could be analysed in the same way as a sentence in which the grammatical place of 'everybody', or 'something' was occupied by proper names, as, for instance, in the sentence: 'John loves Mary'. With the help of the new notation of quantifiers and variables, Frege was able to show that sentences containing

expressions for multiple generality, e.g. 'everybody' and 'something', were constructed by means of step-by-step operations.

The process begins by removing a proper name from a sentence 'John loves Fido' to obtain a one-place predicate 'John loves -'. This predicate can now be combined with a sign of generality 'something'. The resulting sentence 'John loves something' can again be shown as constructed out of a one-place predicate '- loves something' and a sign of generality, e.g. 'everybody' to yield the sentence 'Everybody loves something'.

This procedure enabled Frege to make use of the simple account of the truth conditions of the sentences containing expressions for multiple generality, provided that it was applied only to the particular stages in their construction. Thus, a one-place predicate is true of a given individual, just in case the sentence formed by inserting a name of this individual in the gap of the predicate, is true. According to the same pattern, a sentence formed by means of this predicate and the sign of generality 'everybody' is true, just in case the predicate is true of every individual, while a sentence formed by combining the predicate with the sign of generality 'something' is true of at least one thing. The significance of this insight was so great that Dummett suggests that Frege's theory of quantification, rather than Russell's theory of descriptions, should be called a 'paradigm of philosophy'. (Dummett, 1973, p.9) By bringing a large part of ordinary language within the scope of systematic analysis, Frege's invention made it plausible to suppose that for the first time a general account of the workings of language could be given.

2. The Context Principle.

In the Introduction to The Foundation of Arithmetic, Frege formulated three principles to which, he believed, one

always ought to adhere in the course of any serious inquiry:

- always to separate sharply the psychological from the logical, the subjective from the objective;
- never to ask for the meaning of the word in isolation, but only in the context of a proposition;
- never to lose sight of the distinction between concept and object.

The first principle was particularly important for Frege's endeavour for it expressed the need to get rid of subjective ideas in reasoning and to leave only sound arguments from which logically valid proofs could be derived. Frege insisted that subjective ideas must always be distinguished from logical concepts which, in turn, must be distinguished from objects. In his later works, Frege made this contrast even more clear by recognizing the objective realm of thought.

It was the second principle, however, which came to exercise a great deal of influence on the future theories of language. I have already pointed out in the previous chapter that the principle appeared, almost verbatim, in Wittgenstein's Tractatus and that Davidson also made use of it in his paper 'Truth and Meaning'. Considering the obvious importance of the principle at the time of writing The Foundations of Arithmetic, and its influence on the later philosophers, it seems strange that the context principle made no other re-appearance in Frege's writings. Dummett suggested that when Frege wrote The Foundations of Arithmetic, he had not yet formulated the distinction between sense and reference which might have expressed more accurately the previous thesis. 'It is quite possible', Dummett says, 'that the words "Bedeutung" and "bedeuten", as they occur in the various statements of the thesis, have the more general senses of "meaning" and "mean", so that, in terms of Frege's later vocabulary, we could more accurately render it by saying that it is only

in the context of a sentence that a word has a sense.' (Dummett, 1973, p.193) While G.E.M. Anscombe in her book on Wittgenstein's Tractatus also suggested that Frege's dictum could be interpreted as underlining the fact that to assign reference to a name has a significance only as a preparation for its use in a sentence. She pointed out that assigning a bearer to a name would have no significance if it did not serve as a preliminary step for making use of this name in a sentence. Anscombe and Dummett suggest that Frege's context principle should be interpreted as drawing attention to the special status that a sentence has in language as the smallest linguistic unit by means of which it is possible to say something, i.e. to perform a linguistic act. On their interpretation, the unique role of a sentence in a theory of language must be regarded as the most fundamental insight into the workings of language.

Dummett considers Frege's apprehension of the central role of sentences as the first step, 'not merely to a workable theory of language, but to one which is even plausible'. (Dummett, 1973, p.196) When later Frege assimilated sentences to complex proper names standing for the True and the False, the original perception of a special status of sentences in a theory of language lost some of its clarity. Dummett implies that Frege never repeated the dictum that a word has meaning only in the context of a sentence because, in his later writing, he lost sight of this unique role of sentences.

In the passage which directly follows the three principles Frege speaks of the connection between the second and first principle:

If the second rule is not observed, one is almost forced to take as the meanings of words mental pictures or acts of the individual mind, and so to offend against the first rule as well. (Frege, 1884, X)

It is not surprising that Frege underlines the importance of the first principle, for his primary concern was to guard his investigations against any possible psychological influences which, he thought, had penetrated into the field of logic and arithmetic. The first principle is clearly an expression of Frege's anti-psychologism. He also made it clear that the second, 'contextual' rule, was to be regarded as the corollary to the first one. It, therefore, seems more obvious that the purpose of the third rule is different. The third principle stresses the contrast between concepts and objects. It deals directly with the subject matter which belongs to logic, i.e. with what the first principle describes as logical and objective.

3. Concepts and Objects.

The distinction between concepts and objects was central to Frege's theory of language. It was developed in two articles: 'Function and Concept', published in 1891, and 'On Concept and Object', which was published a year later. The starting point of the investigation which resulted in what must be regarded as one of the most important insights into how language functions, was a mathematical concept of a function. Frege defined a function as an incomplete expression, 'in need of supplementation, or "unsaturated"'. (Frege, 1892a, p.6) He pointed out that any mathematical expression could be split up into the expression for the function and the sign of the argument. He stressed that the argument differed from a function for it is a number, a whole complete in itself, while the function is incomplete. To represent it in a general form, Frege used the letter f to stand for the expression of a function, a pair of brackets to indicate its incompleteness and a Greek vowel to represent the argument, i.e. the number which completes the function. He, then, suggested that the application of a function

to the expressions of addition, subtraction and multiplication should be extended to the expression for equation, i.e. '=', and the related expressions for inequality, i.e. '<' and '>'. It became possible to use the signs for equation and inequality to construct functional expressions e.g. $x^2=1$. Investigating the values of this function for different arguments Frege found that they were consistently either true or false. This made him realize that what is called a concept in logic was closely connected with the notion of a function. In fact, a concept is a function whose value is always a truth-value; for if the value of a function is the True, it can be said that the object falls under the concept which the function is about, and if the value of a function is the False, we can express it by saying that the object which occupies the argument place of the function does not fall under the mentioned concept.

The fact that the values of a function for different arguments was proved to be always one of the two truth-values made Frege realize not only that different expressions, e.g. ' $2 + 2 = 4$ ', ' $2 > 1$ ', could mean the same thing, viz. the True, but also that they could express quite different thoughts. (Frege, 1892a, p.13) This was only a small step away from the most famous distinction associated with Frege's theory of meaning, i.e. the distinction between sense and reference:

If we say 'the Evening Star is a planet with a shorter period of revolution than the Earth', the thought we express is other than in the sentence 'the Morning Star is a planet with the shorter period of revolution than the Earth'; for one who does not know that the Morning Star is the Evening Star might regard one as true and the other as false. And yet both sentences must mean the same thing; for it is just a matter of interchange of the words 'Evening Star' and 'Morning Star,'

which mean the same thing, i.e. are proper names of the same heavenly body. We must distinguish between sense and meaning. (Frege, 1891, p.14)

The dichotomy of sense and reference is only briefly mentioned in 'Function and Concept' but it was soon followed by a more detailed exposition in the article 'On Sense and Reference', published in 1892. Although the distinction between sense and reference of expressions became associated with Frege's theory of meaning and exercised a great deal of influence on the later theories of language, it seems to me that the distinction between concepts and objects deserves to be regarded as his more important contribution to the study of language.

The application of the mathematical concept of a function to the linguistic expressions not only made the analysis of a large part of language possible, but it also offered an insight into its workings, into how sentences can express a thought. Frege was first to show that a statement could be regarded as a linguistic equivalent of an equation and demonstrated that it could also be split up into two parts - one part complete in itself, and the other in need of completion, or 'unsaturated'. Thus, 'Caesar conquered Gaul' can be split up into a function representing the unsaturated part 'conquered Gaul' and a proper name 'Caesar', which refers to the the object, or the argument, so named. Similarly, the expression 'the capital of the German Empire' - which Frege regarded as a proper name, can be analysed into the expression of a function 'the capital of - ' and the sign of the argument. If the German Empire is then taken as the argument, Berlin is the value of the function. Thus, Frege could say that whatever could occur as an argument, i.e. was the value of a function, is an object, or, 'an object is anything which is not a function'. (Frege, 1891, p.18) As Frege had already introduced the two truth-values as the possible values of a function, they too must be

regarded as objects.

Frege's idea that anything that was a sign for an object was to count as a proper name, has been the subject of controversy ever since. Nevertheless, his distinction between concepts and objects has to be regarded as one of his most important insights into the workings of language. The incompleteness of concepts and relations, which he compared to mathematical functions of one and more arguments, provided him with an explanation of how sentences can say something, i.e. how they can express a thought. For an object and a concept, or two objects and a relation fit together, just as a name and a predicate, or two names and a relational expression, can form a sentence. The incompleteness of a concept and a relation, and their predicative nature, explain how a sentence becomes a unit of thought. For only when a one-place predicate is completed with a name of an object, or, a two-place relational expression is completed by two proper names, we get a well-formed sentence which says something about the objects represented by the names. If concepts and relations were of the same kind as objects, a sentence would be a mere collection of names grouped together.

In 1892, Frege published the article 'On Concept and Object' in which he returned to the discussion of the mutually exclusive nature of objects and concepts. He described concepts as predicative, but stressed that a name of an object, i.e. a proper name, could never be used as a grammatical predicate, although it could form a part of a predicate. The confusion which often occurred regarding this distinction was due, as Frege quite correctly observed, to misunderstanding of the difference between the nature of equation and the relation of 'falling under'. It often goes unnoticed, he said, that the equation is a reversible relation while falling under a concept, is not. A proper name can occur as a part of a

predicative expression, as in : 'The morning star is no other than Venus', but this does not contradict the fact that concepts and objects belong to mutually exclusive classes. A proper name could never occur as a predicate proper and a concept could never be the reference of a name. He supported his view by appealing to the fact that we use the definite article, or a demonstrative pronoun, with the names of objects while the indefinite article accompanies the concept-words. (Frege, 1892a, p.195)

The distinction between concepts and objects brought to light an important although apparently confusing feature of language which Frege discussed in the article 'On Concept and Object'. For if we think of concepts and objects as mutually exclusive, it follows that whatever can be said about objects cannot be said about concepts. Yet, we often wish to say something about the concept itself; in which case, the concept must be made the subject of predication. When Kerry, against whom Frege argued at the beginning of his article, had raised this objection, he had quoted the sentence 'the concept horse is a concept easily attained' in which 'the concept horse' appears as the grammatical subject and thus it may reasonably be supposed to refer to some object. Kerry thought that his example contradicted Frege's doctrine that concept-words can never play the role of a grammatical subject. It looks as if Kerry was right to think that the concept 'horse' is an object which falls under the concept 'concept easily attained'. His argument however, misses the target, for although it seems confusing that the concept 'horse' does not mean a concept but an object, it is, nevertheless, quite in agreement with what Frege postulated. For in view of the predicative nature of a concept, to say something about it, it must be first converted into an object, i.e. 'an object must go proxy for it'. (Frege, 1892a, p.197) This is done by prefixing the words 'the concept'. Thus,

Kerry's objection is invalid, for the three words 'the concept "horse"' do, indeed, designate an object. In fact, Frege gave an easily recognizable criterion for differentiating between expressions which can appear in a sentence as proper names of objects and those which can stand for concepts:

If we keep in mind that in my way of speaking expressions like 'the concept F' designate not concepts but objects, most of Kerry's objections already collapse. If he thinks that I have identified concepts and extension of concept, he is mistaken; I merely expressed my view that in the expression 'the number that applies to the concept F' is the extension of the concept like-numbered to the concept F' the words 'extension of the concept' could be replaced by 'concept'. Notice carefully that here the word 'concept' is combined with the definite article. (Frege, 1892a, p.199)

Unfortunately, natural languages are not clear enough in showing this distinction. A thought can be expressed in many different ways, e.g. when a sentence is presented either in active or passive form. But this only adds up to confusion regarding the nature of things which can be named only as the subjects and those which can only occur as the predicates. Frege spoke of the properties ascribed to a concept in The Foundations of Arithmetic :

By properties which are asserted of a concept I naturally do not mean the characteristics which make up the concept. These latter are properties of the things which fall under the concept, not of the concept. Thus, 'rectangular' is not the property of the concept 'rectangular triangle'; but the proposition that there exists no rectangular equilateral rectilinear triangle, does state a property of the concept 'rectangular equilateral rectilinear triangle'; it assigns to it the

number nought. In this respect existence is analogous to number. Affirmation of existence is in fact nothing but denial of the number nought. (Frege, 1884, p.53)

However, as Frege was careful to point out, the fact that something can be predicated of a concept does not blur the distinction between concepts and objects. For what is being said about a concept is not the same as what is said about an object. For instance, in the sentence 'there is at least one square root of 4' it is impossible, as Frege rightly observed, to replace the words 'square root of 4' by 'the concept "square root of 4"'. For although the sentence says something about the concept 'square root of 4', i.e. that it is not empty, it does not present a concept as a subject, as it does in the sentence 'the concept "square root of 4" is realized.' The first sentence says that a concept falls under a higher one, while in the second example, something is said about the object to which the expression 'the concept "square root of 4"' refers. Although both sentences express the same thought, Frege pointed out that what is said in the first sentence concerning a concept, must be distinguished from what the second sentence says about an object. The behaviour of a concept, as regards possible substitutions, is essentially predicative, hence, even when something is said about it, e.g. 'there is at least one square root of 4', it can only be replaced by another concept, never an object.

The contrast between concept and object which Frege first sketched in The Foundations of Arithmetic and later discussed in a series of articles, has not received as much attention as the later distinction between sense and reference. And yet, it seems obvious that the distinction between concepts and objects, and the related distinction between functions and arguments, ought to be regarded as one of Frege's greatest achievements. Frege

thought that this was a distinction of the 'highest importance'. For although he was aware of the difficulties in explaining precisely the nature of the 'unsaturatedness' of a concept, he thought it was obvious that at least one part of a thought had to be 'unsaturated', or predicative, 'otherwise they would not hold together'. (Frege, 1892a, pp.204-205)

The distinction between concept and object not only broke away from the tradition of classical logic but also, by contrasting the incompleteness of concepts, with the complete nature of objects, Frege's doctrine offered a solution to what Dummett described as one of the hardest problems in philosophy of language, i.e. the problem of 'how universals are related to particulars' or, how sentences have sense. It is this problem which persistently baffled Russell and which Wittgenstein also attempted to solve in the Tractatus.

Frege's distinction is not, however, flawless. For instance, his characterization of proper names and concept words has been disputed, notably by Russell who argued in his paper 'On Denoting' against regarding descriptions as the proper names of objects. Frege also believed that classes should be regarded as objects, just like the individual things and his notion of a class gave rise to 'Russell's paradox'. Yet, in spite of the obvious importance of the contrast between concept and object, it was the distinction between sense and reference which initiated most of the arguments with which the philosophy of language has been concerned ever since.

4. Sense and Reference.

Again, it was a mathematical concept of equality which inspired Frege's inquiry into its logical nature. But he was not satisfied with an analysis of that part of language which would be adequate for his logical investigations; the inquiry led him to seek a general

account applicable to all forms of identity statements. His account does not apply only to mathematical statements but concerns language in general.

Although the concept of equality was commonly used to assert some relation between entities, Frege thought that its precise nature was not clear. For instance, it could be debated whether equality was a relation between objects or their names. Yet, if we were to regard an identity statement as a statement about the identity of objects which the names designate, then, ' $a=b$ ' would not differ from ' $a=a$ '; both statements would assert the same relation, i.e. that something is identical with itself. However, it goes against our intuition to say that the cognitive value of the statement ' $a=b$ ' is the same as ' $a=a$ ', for we expect identity statements to be informative. Consequently, it seems that a relation of identity cannot hold between objects. (Frege, 1892, p.26)

On the other hand, if we assumed, as Frege did in Begriffsschrift, that identity was a relation between the names of objects, then we would have to admit that the expression ' $a=b$ ' was only about the linguistic convention of the language to which ' a ' and ' b ' belong, i.e. that it only said that there were two names for the same object. However, appealing again to intuition, Frege argued that the identity statement ' $a=b$ ' said something about the state of affairs in the world rather than merely expressed a linguistic fact. Therefore, he concluded that identity could not assert a relation between the names of objects.

Frege thought that if we considered either reference alone or names only, we could not explain how identity statements were informative. However, he had already implied in Begriffsschrift and in The Foundations of Arithmetic, that one and the same object could be presented in different ways. In 'On Sense and Reference' he returned to this idea and used it to explain how the

identity statements were informative. He confirmed that the identity statements assert the relations between the objects rather than the expressions standing for these objects. The expression 'a=b' does, indeed, describe one entity, but it does so in such a way that it carries information concerning this object, i.e. that it is presented by means of different senses. This can be expressed more precisely by saying that the senses attached to expressions 'a' and 'b' refer to the same entity. Thus, the sense of 'the evening star' differs from the sense of 'the morning star' although both expressions refer to the same object, i.e. the planet Venus.

In grasping the sense of a proper name, Frege argued in 'On Sense and Reference', we do not only associate this name with an object as that to which the name refers, but we also acknowledge a particular way in which this object is presented. The sense of an expression could be described as a particular mode of presentation of its reference. Thus, the distinction between sense and reference of expressions not only explained how different names or signs could be used to designate one entity but also provided Frege with an answer to the problem of the cognitive value of true identity statements. An expression formed by the identity sign joining two proper names designating a single object can be informative, if true, because, to use Frege's metaphor, there can be more than one 'route' from a name to its reference and each route corresponds to one of the many senses associated with this name.

The distinction between sense and reference not only enabled Frege to explain the problem of identity statements but also, it brought to light several problematic issues which provoked a great difference of opinions. One of the problems raised by the distinction which became the object of Russell's criticism, concerns

the nature of the relation of the sense to the reference:

...the difficulty which confronts us is that we cannot succeed in both preserving the connection of meaning and denotation and preventing them from being one and the same; also that the meaning cannot be got at except by means of denoting phrases. (Russell, 1905, p.49)

Frege himself was aware of the difficulty in grasping the nature of the connection. He carefully tried to explain what he meant by the sense of an expression and why he thought it was different from the reference, or the associated idea:

The idea is subjective: one man's idea is not that of another. There result, as a matter of course, a variety of differences in the ideas associated with the same sense. A painter, a horseman, and a zoologist will probably connect different ideas with the name 'Bucephalus'. This constitutes an essential distinction between the idea and sign's sense, which may be the common property of many people, and so is not a part or a mode of the individual mind. (Frege, 1892b, 29)

Further on, he implies that the reference designated by a proper name is somehow mediated by means of its sense. But he was careful not to imply that the sense of an expression could be compared to the idea. If the reference of a proper name is an object, Frege argued, 'the idea which we have of it is wholly subjective; in between lies the sense which is no longer subjective like the idea, but is yet not the object itself.' (Frege, 1892b, 30) Ideas were to be regarded as mental entities which, unlike senses, had no existence apart from the individual's mind; senses were 'objective' and could be the common property of people. (Frege, 1892b, 29)

The insistence on objectivity forced Frege to

recognize a third realm of thought different from the realm of material objects and subjective ideas. But the distinction between subjective ideas and objective senses is not always as clearly cut out as Frege wished to hold. The point will be made clear by considering first Frege's views about what is to count as a proper name.

5. Proper Names.

Frege never really bothered to give a systematic explanation of the category of proper names and seemed quite satisfied with the brief statements he made about proper names. In The Foundations of Arithmetic he defined proper names as 'the expressions in singular conjoined with the definite article or a demonstrative pronoun'. (Frege, 1884, 51) In 'Concept and Object', he simply said: 'I call anything a proper name if it is a sign for an object'. (Frege, 1892, 197, footnote) Discussing Frege's notion of a proper name Dummett pointed out that it would be surprising if Frege was not aware of the imprecision of his criterion for recognition of a proper name. He seemed, nevertheless, quite contented with the definition he gave in The Foundations of Arithmetic and he was not even concerned that this criterion might not apply to some languages lacking the article altogether.

Frege's category of proper names included all the expressions, simple and complex, which named an object. For the reasons which I shall explain later, Frege also included in this category the names of fictitious characters which did not designate any real entity. He regarded as 'proper names' all ordinary names, definite descriptions, as well as whole declarative sentences which he regarded as a special kind of proper name, i.e. names which designate the True or the False.

Frege's views on what was to be included in the category of proper names gave rise to many arguments concerning the nature of names. The problem was

discussed by both Russell and Wittgenstein and has continued to be the topic of the more recent discussions. Frege insisted that the distinction between sense and reference applied to all names, even genuine proper names and the problem whether proper names have sense as well as reference became the central issue in the discussions. Frege identified the sense of proper names with the sense of a co-designative definite description but on some views, proper names are 'labels', i.e. they simply designate a specific individual. This view was held by John Stuart Mill who thought that proper names were not connotative but denoted the individuals who were called by them. (J.S.Mill, A System of Logic, 1843, p.36) More recently Kripke also proposed that proper names should be regarded as 'rigid designators', i.e. expressions which designate a specific individual, not in virtue of its being the individual which..., but in virtue of being that specific individual. (Kripke, 1972)

Frege believed that all names, even genuine proper names, e.g. 'Aristotle', had a sense which could be equated with the sense of some definite descriptions, e.g., 'the pupil of Plato'. However, he was aware of the undesirable consequences created by the possibility of different descriptions by which the entity referred to by the name was known:

The sense of a proper name is grasped by everybody who is sufficiently familiar with the language or totality of designations to which it belongs but this serves to illuminate only a single aspect of the thing meant, supposing it to have one.

Comprehensive knowledge of the thing meant would require us to be able to say immediately whether any given sense attaches to it. To such knowledge we never attain. (Frege, 1892b, 27, footnote)

If the sense of a name is variable between speakers, there are no fixed criteria by which the bearer of the

name can be identified. It may even be argued that because the sense of some definite description which the speaker identifies as the sense of the name, depends on what he knows about the object, it is arbitrary and subjective what sense he attaches to a proper name. Frege always insisted on the objectivity of senses which he contrasted with the arbitrary ideas of different speakers. It is, therefore, surprising that he dismissed the problem created by the variation of senses which different speakers ascribe to one name as arising merely from the imperfection of a natural language. He was prepared to tolerate this defect 'so long as the thing meant remains the same'. (Frege, 1892b, 27, footnote)

Frege blamed the imperfection of language for yet another difficulty which arises from the fact that some expressions of language can be employed in a sentence as proper names when, in fact, they do not designate any particular entity. It is contrary to the informal definition of a proper name which Frege proposed, i.e. a proper name is an expression which designates an object, to regard as proper names those expressions which do not refer to any particular entity, e.g. 'divergent infinite series', or refer to some fictitious characters like 'Odysseus'. This misleading feature could not possibly occur in a logically perfect language in which, Frege thought, every expression which was grammatically well constructed as a proper name, would, in fact, designate an object. In a perfect language, any new sign introduced as a proper name would be secured reference. This could be done, for instance, by stipulating that the sense of a grammatically well constructed expression which lacked any reference, e.g. 'divergent infinite series', designated the number 0. Frege, however, did not think that ordinary language is logically well constructed and regarded it as one of its flaws that the non-referring expressions could be used as proper

names.

Considering sentences of the ordinary language which contained a non-referring name as a subject, Frege was forced to conclude that such a sentence also had sense but no reference:

The sentence 'Odysseus was set ashore at Ithaca while sound asleep' obviously has a sense. But since it is doubtful whether the name 'Odysseus', occurring therein, means anything, it is also doubtful whether the whole sentence does. (Frege, 1892b, 32b)

It may seem that by saying that a sentence in which the grammatical subject lacks reference, itself has no reference, i.e. it has no truth-value, Frege allowed that some propositions were neither true nor false. Susan Haack implies in her book Philosophy of Logics that Frege's analysis of sentences which contain non-referring names as their grammatical subjects, calls for a non-bivalent logic, i.e. in which some grammatically well-formed expressions are neither true nor false. (S. Haack, 1978, pp. 67-72) She agreed, however, that Frege did not advocate such a logic, for he believed that the use of non-referring expressions as the grammatical subject of a proposition was an imperfection of the natural languages. According to his view, in a logically perfect language, all names should be guaranteed reference, even if it was to be artificially supplied as the number 'zero'. But he had to allow that when the sentences of a natural language were concerned with the objects of fiction, their sense was all that mattered.

The imperfection of natural language which allowed the use of non-referring expressions as proper names did not deter Frege from applying his doctrine to all expressions which he regarded broadly as the names of objects. With its help Frege was able to argue that a proper name can designate an object by means of the sense attached to it, although a referent is not necessary for the name to

express sense.

In spite of the numerous objections which have been raised against Frege's doctrine of sense and reference, and the controversial views on proper names which he held, the distinction was thought to have succeeded in explaining how expressions without any reference function as proper names. For if we are prepared to include non-referring expressions in the category of proper names, then Frege's doctrine provides an explanation of how such names function in language. However, the issue is too complex to be mentioned in a footnote and dismissed as a mere defect of language.

The problem of the discrepancy between proper names in natural languages and singular terms in formal languages, which was brought to light by Frege's argument, became one of the most recurring topics of discussions among the philosophers concerned with language and its workings. Russell, for example, denied that non-referring expressions were genuine names and regarded such expressions, as well as all ordinary names, as disguised definite descriptions. He showed that sentences about such entities as Pegasus, or Sherlock Holmes, or 'the present king of France' could be truth-functionally analysed as straightforward existential statements without presupposing artificial entities to safeguard their meaningfulness.

Following Russell, Wittgenstein made a sharp distinction between genuine proper names which uniquely designate an object and definite descriptions; his picture theory of propositions presented in the Tractatus relies heavily on the contrast between names and propositions which Frege had failed to uphold. Wittgenstein summed up his views by saying that 'names are points, propositions like arrows - they have sense.' (Wittgenstein, T.3.144) In his later life, Wittgenstein's views changed and he argued in The Philosophical Investigations that the

meaning of a sentence in which a name occurs does not depend on the existence of the bearer of that name, or on a speaker's competence to substitute a definite set of descriptions for that name. Names, Wittgenstein argued, have no fixed and unequivocal meaning but this fact does not detract from their usefulness in language. (Wittgenstein, PI, 40, 79)

The debate regarding the nature of the category of proper names has continued in more recent time. In his essay 'Naming and Necessity' Saul Kripke criticized 'the Russell-Frege view' to which he referred as the 'description' theory of names. But Frege's theory is not, strictly speaking, a straightforward 'description' theory of names but a 'sense' theory, and Russell did recognize a special category of proper names which he called 'logically proper names', i.e. names which refer 'directly'. From Kripke's point of view, even the theory of names which Wittgenstein presented in the Philosophical Investigations does not differ from Frege's and Russell's and becomes the subject of the same criticism. Kripke does not deny that the reference of the name can be fixed by means of a definite description. What he refuses to accept is that names and descriptions behave in the same way in all modal contexts. For instance, the proper name 'Aristotle' functions as a rigid designator for it designates the same individual in all possible worlds. While a definite description, for example, 'the philosopher who was the teacher of Alexander the Great' has no fixed reference in all modal contexts for it is quite admissible, Kripke argued, that in some possible world Aristotle could not have been the teacher of Alexander. We can say 'Aristotle might not have been the teacher of Alexander' and mean that we can consider situations in which the things named do not have properties used to describe them. But we cannot say that 'Aristotle might not have been Aristotle' for 'Aristotle'

is a rigid designator and it designates the same thing in all possible worlds. Thus, Kripke's account of this difference uncovered a new feature of the logic of proper names.

The dispute between Quine and Strawson centred on yet another aspect of the nature of singular names and descriptions. Quine suggested that we do not need singular terms at all. All singular terms are eliminable, he claimed, for they can be replaced by definite descriptions and then, following Russell's theory, all definite descriptions can be replaced by quantifiers and variable. Hence, Quine concluded that since 'whatever we say with the help of names can be said in a language which shuns names altogether', names cannot carry ontological commitment which he ascribed to the quantified variables. Or, as his well-known slogan says: 'to be is to be the value of a variable'. (Quine, 1953, p.13)

Quine's thesis of the eliminability of singular terms has been, in turn, taken to task by Strawson who argues that the fact that one can replace a proper name by an appropriate definite description, is not a proof that singular terms are ontologically irrelevant, or that we could ever speak a language without singular terms. (Strawson, 1961)

The debate between Quine and Strawson has been focused in the end on claims regarding the nature of language acquisition and it has become the starting point of Davidson's novel approach to the theory of language which he first sketched in 'Theories of Meaning and Learnable Languages'. (Davidson, 1965) The lesson which Davidson drew from the debate was that 'it is not appropriate to expect logical considerations to dictate the route or mechanism of language acquisition, but we are entitled to consider in advance of empirical study what we shall count as knowing a language, how we shall describe the skill or ability of a person who has learned to speak a language'.

(Davidson, 1965, p.7) These words contain a kernel of Davidson's programme of research in semantics which will be discussed in this thesis as the latest approach to the studies of language and meaning which have been shaped and influenced by Frege's ideas.

Frege applied the distinction between sense and reference to all expressions of language which he thought of as proper names. This category included also whole sentences which he regarded as names of the truth-values. Thinking of sentences as a special category of proper names led, as Dummett said, 'to a great simplification in Frege's ontology, at the price of a highly implausible analysis of language'. (Dummett, 1973,p.183)

Frege suggested that every declarative sentence contains a thought. He then argued that the thought could not be the reference of a sentence for if we replaced one of the words in the sentence by another that had the same reference but a different sense, the reference would remain the same but not the thought:

The thought, accordingly, cannot be what is meant by the sentence, but must rather be considered as its sense. (Frege, 1892b,32)

Considering the distinction between sense and reference, Frege argued that a name must have sense but need not have reference. Similarly, a sentence in which a non-referring expression occurs as its grammatical subject, will have sense but no reference. But the fact that we concern ourselves at all about the reference of a part of a sentence is an indication that we generally expect a reference for the sentence itself. 'It is the striving for truth that drives us always to advance from the sense to the thing meant'. (Frege, 1892b,33) He thought that while we may be satisfied only with the sense of a work of fiction, we wanted to know whether, for instance, propositions of science, or statements of facts, are true. Since it is only when we are concerned with the truth of a

sentence that the problem of the reference of proper names becomes relevant, Frege suggested that we were 'driven into accepting the truth-value of a sentence as constituting its reference'. (Frege, 1892b,34) Consequently, he concluded the argument by stating that:

Every assertoric sentence concerned with what its words mean is therefore to be regarded as a proper name, and its meaning, if it has one, is either the True or the False. (Frege, 1892b,34)

It follows that all true sentences have the same reference which Frege called the True, and all false sentences stand for the False. The True and the False were to be regarded as the objects designated by the sentences which thus, could be thought of as a special category of complex names.

By assimilating sentences to proper names Frege blurred the distinction which on some interpretations, e.g. Anscombe's and Dummett's, was implied by his context principle and deprived sentences of their unique role in language. The assimilation of sentences to proper names designating either the True or the False obliterated all that is specific about sentences. It made Frege's ontology simpler but, as Dummett pointed out, at the price of the theory of meaning. For it is obvious that sentences and names do not function in the same way. We use names to single out some particular entities, i.e. 'things' which bear these names, while the role of sentences is much more complicated. To say that all sentences are either the names of the True or the False is to ignore the variety of things that the sentences do.

6. Reported Speech.

Frege devoted a large part of 'On Sense and Reference' to the defence of his view that a truth-value is the reference of a sentence that has a thought as its sense. He rightly envisaged that it may not always be possible

to replace one part of a sentence by an expression which has the same reference or, in a compound sentence, by another sentence of the same truth-value, without harm to the truth-value of the whole sentence. His analysis of such sentences was meant to show that the cases when the expression is not replaceable by another referring to the same object, or, when the subordinate clause is not replaceable by another of the same truth-value according to the law of substitutivity, were perfectly well explainable and could not be brought in as a disproof of his doctrine.

When names are used in ordinary discourse, Frege argued, their reference is what we speak of. But, as it often happens, we may also want to talk either about the words themselves, or their sense, and we do so by enclosing the whole expression we want to talk about into quotation marks, or prefixing it with the phrase 'the sense of'. When the words are enclosed in quotation marks, they cannot any longer be thought of as referring to what they normally do, i.e. an object designated by the name, because they now designate the words of the original speaker. In order to speak of the sense of an expression 'X' we may simply say 'the sense of the expression "X"' and now, the whole expression refers not to the usual reference of 'X' but to its customary sense. In direct quotation, Frege says, we have 'signs of signs', i.e. the words standing between the quotation marks, can no longer be taken as having their customary senses and references. (Frege, 1892b, 28) Davidson described this linguistic phenomenon as a peculiar feature of language in which words turn on themselves in a reflexive twist. (Davidson, 1979a)

Frege summed up his observations regarding the sense and reference of the quotation marks expressions by saying that in quoting somebody's words, we use these words 'indirectly' to refer to the customary sense of the

expression and not to its usual reference. The apparent failure of extensionality with regard to singular terms can therefore be explained as founded on the incorrect assumption that expressions enclosed in quotation marks have their usual reference.

Frege was concerned with defending his doctrine against more serious objections regarding the apparent failure of the law of substitutivity of sentences in indirect discourse. To defend his supposition that the reference of a sentence is the truth-value, he had to explain why it is not always possible to replace one part of a sentence by another with the same truth-value, without harm to the truth-value of the whole sentence. The failure of substitutivity most obviously affects sentences occurring in what Frege called 'oblique' contexts, i.e. after verbs referring to what is said, thought or believed, after modal verbs and the expressions: 'it is necessary', 'must' or 'want', etc., and in some other cases, e.g. when the subordinate clause is governed by the words 'that' or 'whether'.

Frege devoted a large part of his paper 'On Sense and Reference' to what he believed was a systematic analysis of representative sentences which generated difficulties for his views. Considering sentences in indirect discourse, i.e. sentences reporting what someone says, thinks, or believes, Frege agreed that it was not permissible to replace one expression in a subordinate clause by another having the same customary reference, for it would change the truth-value of what was reported. But it is alright to replace one expression in the subordinate clause by another one having the same indirect meaning, i.e. the same customary sense, without harm to the truth of the whole sentence. This shows that the apparent failure of extensionality of sentences in oblique contexts was due to the fact that these sentences referred indirectly, i.e. their reference was not a truth-value but

a thought.

There are, however, some sentences in oblique contexts which refer in their usual way but have no thought as sense or truth-value as a reference. It happens when the grammatical subject of a subordinate clause is an expression which has no independent sense, as in Frege's example: 'Whoever discovered the elliptic form of the planetary orbits died in misery.' The subordinate clause whose subject is an indefinite indicator, e.g. 'whoever', must be regarded as incomplete and expressing a thought only when combined with the main clause. Here again, according to Frege, it is not a case of violation of Leibniz's law of substitutivity but merely of misinterpreting the context.

Frege, of course did not claim that he had explained all possible kinds of sentences which do not comply with his view that the reference of a sentence is one of the truth values. He hoped, however, that by providing an explanation of the apparent failure of extensionality for the quotation marks expressions and sentences in oblique contexts, he had shown with sufficient probability that they did not disprove his views.

Frege regarded quotation as a grammatical construction in which the quoted expression was semantically relevant. He was the first one to point out that in reported speech we are faced with a linguistic device which creates a context within which the words and the whole sentences are subjected to a referential shift. Not everybody could agree with his view. For example, when Alfred Tarski formulated his theory of quotations, he proposed that 'the only defensible interpretation of the device' was to treat the quotation marks expressions as logically simple names. (A.Tarski, 1931) Quine also made a similar suggestion by saying that an expression in quotation marks occurs merely 'as a fragment of a longer name which contains besides this fragment, the two

quotation marks'. (Quine, 1953) Davidson offered yet another explanation. His recent attempt at the 'semantic taming' of quotation, though different from Frege's, is, nevertheless, closer to his view of the structured quotations than to Tarski's theory which treats quotations as structureless singular terms. His proposal will be discussed in the sixth chapter.

It is no longer possible to agree with Frege's analysis of reported speech. His analysis of quotation marks expressions seems, in hindsight, insufficient, while the role of sense, or thought, in explaining the reference shift of the expressions in reported speech, was devastated by Russell's criticism in 'On Denoting'. Nevertheless, Frege's recognition of the problem which sentences in oblique contexts presented for a truth-functional analysis of language, and his attempt to solve it, provided ideas which influenced many of the later proposals.

III. RUSSELL'S THEORY OF MEANING.

The Principles of Mathematics was Russell's first important work in which he attempted to prove that mathematics deals with concepts which can be defined in terms of a small number of logical concepts and principles. In the course of analysis of these concepts, Russell, like Frege, realized that his theory raises some fundamental logical questions which require a thorough understanding of language in which these problems are expressed. He also realized that the study of logical forms of linguistic expressions, which he called 'philosophical grammar', was capable of throwing more light on many puzzling philosophical problems than was commonly supposed. Although later Russell rejected and modified many of the arguments which he had offered in The Principles of Mathematics, he never gave up one of the most fundamental assumptions about the nature of language and its connection with the world which he formulated in this work:

Although a grammatical distinction cannot be uncritically assumed to correspond to a genuine philosophical difference, yet the one is prima facie evidence of the other, and may often be most usefully employed as a source of discovery. Moreover, it must be admitted, I think, that every word occurring in a sentence must have some meaning: a perfectly meaningless sound could not be employed in the more or less fixed way in which language employs words. (Russell, 1903, 46)

Russell believed that since we use language to say meaningful things about the world, it is necessary that the words which make up sentences were somehow connected with the reality which they described. This conception of language was already evident in Russell's Principles of

Mathematics but it found its fullest expression in 'The Philosophy of Logical Atomism' where Russell further developed the idea that 'words all have meaning in the simple sense that they are symbols which stand for something other than themselves'.(Russell, 1903, 51)

1. The Unity of the Proposition.

Although the idea of a symbolic function of language was not new, e.g. it can be found in David Hume, Russell adopted a rather extreme form of it in his early works. Not only did he believe that 'the ordinary use of words is as a means of getting through to things' (Russell, 1918, p.246), but, at the time he wrote The Principles of Mathematics, he also thought that every entity symbolized by words in a proposition 'has being, i.e. is in some sense'.(Russell, 1903, 47) Russell soon realized that such an ontologically extravagant view could not be correct for it did not account for the words and complex expressions which were used as the grammatical subjects of the propositions but which did not stand for any particular entity in the world. In the paper 'On Denoting' he suggested a different way of thinking about the expressions which 'denote' and proposed a theory which offered an explanation of how these expressions function in language.

In The Principles of Mathematics Russell introduced a general expression 'term' to refer to everything that could be the object of thought and could occur in any true or false proposition. He proposed to use this expression to refer to everything that can be named and counted as one:

A man, a moment, a number, a class, a relation, a chimera or anything else that can be mentioned, is sure to be a term (Russell, 1903, 47)

The notion of a 'term' was to be applied to everything that words in a proposition stand for, i.e. all concepts

as well as objects to which Russell referred as 'things':
Among terms, it is possible to distinguish two kinds,
which I shall call respectively 'things' and
concepts. The former are the terms indicated by
proper names, the latter those indicated by all
other words. (Russell, 1903, 43)

However, the belief that every word in a proposition
stands for a genuine constituent presents a problem of
how to account for the unity of a proposition. For the
view which Russell proposed in The Principles of
Mathematics implies that a proposition is just a list of
words. Russell was well aware that this view could not be
correct, for thinking of every word in a sentence as a
'term' does not amount to knowing what the sentence
means. Like Frege, Russell knew that from a list of
words, e.g. 'A', 'B', 'difference', one cannot reconstruct
a meaningful proposition: 'A differs from B'. This is how
he described the problem:

The constituents of this proposition, if we analyse
it, appear to be only A, difference, B. Yet these
constituents, thus placed side by side, do not
reconstitute the proposition. The difference which
occurs in the proposition actually relates A and B,
whereas the difference after the analysis is a
notion which has no connection with A and B...

A proposition, in fact, is essentially a unity,
and when analysis has destroyed the unity, no
enumeration of constituents will restore the
proposition. (Russell, 1903, 54)

The problem concerns all concepts employed in a
proposition, i.e. the adjectives as well as the verbs
which Russell regarded as the relational expressions. He
argued that if a proposition, e.g. 'Socrates is human'
had only one term, the 'is' in this proposition could not
express a relation in the ordinary sense. Nevertheless, he
thought that the proposition implies a relation between

Socrates and humanity, as it is very difficult to conceive the proposition as expressing no relation at all. He, therefore, concluded that the true logical verb in a proposition should be always regarded as asserting a relation. (Russell, 1903, 53)

Russell thought that all concepts, unlike things, have a two-fold capacity: they may occur in a proposition as concepts-as-such, or as the subjects. Thus, he postulated that, e.g. 'human' and 'humanity', in spite of the different grammatical functions, must be regarded as logically equivalent, i.e. denoting the same concept. Similarly, he thought that a verb used as a relational expression had to be regarded as logically equivalent to a verbal noun. He pointed out, however, that relational expressions must be distinguished from other concepts by their connection with truth and falsehood. This feature disappears when the verb is transformed into the logically equivalent verbal noun and the whole proposition turns into a single logical subject. Thus, according to Russell's thesis, 'Caesar died' should be regarded as logically equivalent to 'the death of Caesar', although the second expression can no longer be asserted as true.

Russell thought that just as relational expressions are characterized by their connection with truth, other concepts are distinguished by their capacity for denoting:

A concept denotes when, if it occurs in a proposition, the proposition is not about the concept, but about a term connected in a certain peculiar way with the concept. (Russell, 1903, 56)

Russell suggested that the explanation of the two-fold use of concept-terms consists in the capacity of adjectives for denoting and the indefinable feature of verbs in virtue of which they actually relate the terms in a proposition. This explanation soon runs into difficulties for it applies only to true sentences. 'A differs from

B' must always be true, for Russell believed that it is absurd to talk about the relation between A and B which does not hold. It is obvious, however, that a verb does not always indicate the actual relation between the terms of a proposition, e.g. a proposition can be false. Consequently, Russell was forced to say that only true propositions can be asserted in a 'logical' sense:

True and false propositions alike are in some sense entities, and are in some sense capable of being logical subjects; but when a proposition happens to be true, it has a further quality, over and above that which it shares with false propositions, and it is this further quality which is what I mean by assertion in a logical as opposed to a psychological sense. (Russell, 1903, 52)

The problem of how to account for the unity of the proposition, i.e. how to explain that a proposition says something, remained unresolved in The Principles of Mathematics. However, the importance of the subject made Russell return to it again later. In 'The Philosophy of Logical Atomism', he argued, concerning the logical form of a belief, that if a verb functions as a verb, it has to relate somehow the terms in a proposition, in order that its logical unity could be preserved. Consequently, he thought it was reasonable to expect that the verbs in a proposition, e.g. 'A believes that C loves D' actually relate the entities indicated by A, C, and D. (Russell, 1918, p. 225) However, the fact that Desdemona did not love Cassio proves that 'loves' in: 'Othello believed that Desdemona loves Cassio' does in no way relate her to Cassio. This made it impossible to explain how there could be a false belief. For if the verb 'loves' in 'A believes that B loves C' really indicated a relation between B and C, then the non-existent love between Desdemona and Cassio would be just as mysterious as Meinong's non-existent entities. Consequently, the

logical form of belief could not be explained in terms of a relation holding between the subject and the object of his belief.

The failure to explain the unity of the proposition by appealing to the indefinable feature of verbs which embodied this unity, and which, Russell argued, rendered it distinct from the sum of its constituents, concerns all concepts which imply a relation between the terms of a proposition. However, the problem of unity was already intensified by Russell's refusal to assign different entities to expressions used substantivally and predicatively. He argued that it was wrong to assign different sort of entities to expressions occurring predicatively, e.g. 'human' and substantivally, e.g. humanity, because the difference was only grammatical. Whether a concept occurs as a predicate, or as a substantive, does not depend on any intrinsic feature of a concept but only, he thought, on the relation the expression has to the other elements of a proposition. Thus, although the propositions: 'Socrates is human' and 'Humanity belongs to Socrates' are distinct, they are logically equivalent, for 'human' and 'humanity' indicate precisely the same concept, regardless of whether it takes the grammatical form of a predicate or is used substantivally.

Suppose, Russell argued, we would like to make a distinction between a concept-as-such and a concept-used-as-a-thing, and assigned different entities to concepts indicated by 'is' or 'human' and 'being' or 'humanity'. Then, if we wanted to refer to a predicative expression in: ' "Is" does not mean "being"', the predicative expression 'is' would have to be used as a substantive. It can only mean, Russell thought, that either 'is' has been made into 'being', which contradicts the statement, or else, there is some other difference between 'is' and 'being' in addition to the fact that 'is' indicates a

concept, not a thing, while 'being' indicates a concept which is a thing. However, it still means that there are propositions in which 'is' indicates a thing as opposed to 'is' indicating a concept. And this would make all propositions asserting the difference between 'is' and 'being' false, since a proposition about 'is' as a concept makes 'is' into a subject, and therefore, it is really about 'is' as a term. Whatever expression we use to refer to the entity indicated by a predicative or relational expression will be a substantival expression, and this makes all statements concerning different entities indicated by concepts used as predicates or relations and concepts used as substantives, self - contradictory.

It appears then, that the attempt to explain different semantic roles by means of assigning different entities to concepts-as-such, i.e. used as predicates or relations, and concepts used as substantives, does not work. In fact, this is the difficulty to which Frege referred when he pointed out the awkwardness of language in which the concept 'horse' is not a concept. Russell refused to accept that the difference of semantic roles could be marked by the difference in entities for which the expressions stand in a proposition and insisted that all concepts, in whatever form they are employed in a proposition, always indicate the same entity. In contrast to Frege's view, Russell thought that the concept 'horse', like 'humanity' or 'a man' is a concept, regardless of whether it is used as a predicate, as in 'Bucephalus is a horse', or whether it is used substantivally. This made Russell's explanation incapable of accounting for the difference in the semantic roles of different constituents of a proposition.

The problem about the unity of the proposition remained unresolved in The Principles of Mathematics. When Russell returned to the problem in 'The Philosophy of Logical Atomism', he failed again to explain the logical

form of sentences containing verbs of propositional attitudes by means of the 'indefinable' feature of the verb which embodies the unity. In 'The Philosophy of Logical Atomism' there is, however, an indication that Russell might have thought of yet another way of dealing with the problem.

Considering the structure of a proposition, Russell pointed out that understanding a predicate involves knowing the form of an atomic proposition in which it occurs:

To understand a name you must be acquainted with the particular of which it is a name, and you must know that it is the name of that particular. You do not, that is to say, have any suggestion of the form of a proposition, whereas in understanding a predicate you do. To understand 'red', for instance, is to understand what is meant by saying that a thing is red. (Russell, 1918, p. 205)

Unlike knowing the meaning of a name which involves acquaintance with the particular of which it is a name, the understanding of a predicate like 'red' implies understanding of all propositions in which '...is red' occurs. Once you have grasped what the meaning of 'red' is, Russell seems to imply, you can understand any proposition of the form: 'x is red' (Russell, 1918, p. 195)

The attempt to explain how the form of a proposition is involved in understanding the meaning of a predicate is preceded by Russell's remark that neither a predicate, nor a relation, can ever occur except as a predicate or a relation, never as a subject. (Russell, 1918, p. 205-206). In view of the earlier suggestion this remark can be interpreted as implying that there is no non-predicative use of concepts to be explained. It means, in fact, that the sentences containing abstract singular terms can be reduced to sentences in which only the corresponding predicative terms occur. Consequently, terms

like 'humanity', 'being' could be eliminated without loss, if the propositions in which they occurred were replaced by propositions containing concepts indicated by the corresponding adjective or verb.

This implication is discussed by Sainsbury who argues that Russell did not succeed in showing that there was no call for an independent account of the use of abstract singular terms. (M.Sainsbury, 1979, p.23) For although Russell held distinctly in The Principles of Mathematics that 'human' and 'humanity' indicate one concept, he also believed that the sentences: 'Socrates is human' and 'Socrates instantiates humanity' express two different propositions. Therefore, Sainsbury argues, it is impossible that a sentence containing an abstract singular expression could be reduced without loss to a sentence containing only a corresponding predicative word:

Granting this, it is hard to see how it can be denied that the role of 'human' differs from that of 'humanity', from which it follows that there is a distinctive contribution to be explained, and thus it is wrong to suggest that there is no non-predicative use. (Sainsbury, 1979,p.23)

It may seem that the proposition 'Socrates instantiates humanity' appears spurious in virtue of another proposition which is equivalent to it, nevertheless, this is not a proof that the abstract singular terms, e.g. 'humanity', 'redness', can be eliminated. Besides, as Sainsbury pointed out, there are some sentences containing abstract singular terms which cannot be in any obvious way reduced to sentences which contain only equivalent predicative expressions, e.g. 'Patience is a virtue'. (M.Sainsbury, 1979,p.23) But even if it was possible to construct a theory which could unravell the predicative origin of such sentences, it still would not support Russell's claim that every sentence in which an abstract singular term occurs can be reduced to a sentence with a

corresponding predicative expression.

However, Russell's suggestion, i.e. that understanding 'red' involves knowing what it is to say that something is red, identifies correctly a feature in his theory of meaning which is not sufficiently explained by assigning entities to every word in a sentence. For even if it were possible to enumerate all entities for which the words stand in a proposition, this would not amount to knowing what a proposition means. Russell knew very well that a proposition cannot be regarded as a mere list of words, and that no assigning of entities will result in 'grasping' the meaning of a sentence. For even if one knows that 'roses' names roses as the entities for which the word stands, and that 'red' indicates redness, one may still not know what the sentence 'Roses are red' means. This is why Russell's suggestion that we must also know the meaning of saying that anything is red, is important to his theory of meaning, even though the essential part of this theory is constituted by the doctrine that the meaning of each meaningful expression is some entity.

In his paper 'On Denoting' and in 'The Philosophy of Logical Atomism', Russell tried to find a remedy for some of the problems which the assignment of entities as the meanings of words had created. He realized that his early attempt to provide a complete account of meaning in terms of entities for which the words in propositions stand was an impossible task. But he would not change his views about the nature of referring expressions. Therefore, he had to explain how expressions which do not refer to any particular entities in the world can occur as the grammatical subjects of propositions. Russell's theory of the functioning of denoting expressions was explained in the paper 'On Denoting'.

2. 'On Denoting': Russell's Criticism of Frege's Theory of Meaning.

A. The break from tradition.

'On Denoting' is devoted to the exposition and critical discussion of Russell's own theory of descriptions in which he challenged the validity of the traditional classification of definite and indefinite phrases as genuine referring expressions. It also contains Russell's criticism of the theories of his predecessors, Frege and Meinong and an explanation of the reasons behind his refusal to regard the denoting expressions as genuine names. The theory of descriptions was designed to show that the difficulties which arise when expressions classified as definite or indefinite descriptions were regarded as genuine referring expressions, could be solved without appealing either to the non-existent entities which Meinong was forced to introduce, or to purely conventional denotation which Frege had to provide for non-referring names. Russell did not spare his own earlier views either, and admitted in 'On Denoting' that he was wrong to believe that every word in a proposition stands for a term.

Although Russell, unlike Frege, never held that a whole sentence can be regarded as a name, his early views about what could count as a proper name were ontologically extravagant. Included were, among other things, denoting phrases, i.e. expressions formed by prefixing any common noun with 'all', 'every', 'any', 'a', 'some' or 'the', as well as names which do not refer to anything particular in the world. According to the view he held in The Principles of Mathematics, a denoting phrase could not only occupy the same place in a proposition as a proper name, but indeed, was regarded as a proper referring expression. However, it was not long before Russell realized that denoting phrases cannot belong, together with proper names, to the same category of referring

expressions.

'On Denoting' contains three arguments against regarding definite descriptions as referring expressions. The first argument raises the problem of the meaning of an identity statement in which the denoting phrase can occur. If a denoting phrase was a genuine referring expression, then the sentence: 'Scott is the author of Waverley' would express nothing more than Scott is Scott. And yet, the proposition 'Scott is the author of Waverley' is not identical to 'Scott is Scott' for we may ask of the first one whether it is true or false but not of the second.

Similarly, if something were predicated about the present king of France, e.g. that he was bald, then, in accordance with the law of excluded middle, the resulting proposition would have to be either true or false. However, what 'the present king of France' means does not appear among any of the things of which it can be truly or falsely said that they are bald. This shows, Russell argued, that something must be wrong with the usual interpretation of the logical status of the denoting expressions, e.g. 'the present king of France', which can occur in a proposition as its grammatical subject, although it does not refer to anything particular in the world.

The same difficulty arises with the denoting expressions referring to abstract entities. Russell argued that if a proposition 'A differs from B' consisted of names referring to three terms: 'A', 'difference' and 'B', as he thought earlier, then, it would be possible to say that the difference does not subsist when 'A' and 'B' do not differ. But if the difference does not subsist, it is absurd to suppose that we can meaningfully talk about it. 'A non-entity', Russell said, 'cannot occur as the subject of a proposition'. (Russell, 1905, 43)

Russell objected to Frege's doctrine of distinction between sense and reference as not solving any of these

problems and argued in 'On Denoting' that although the meaning is relevant when a denoting phrase occurs in a proposition, the whole distinction was wrongly conceived. Frege thought that his doctrine could explain why an identity statement, e.g. 'Scott is the author of Waverley' expresses information which the proposition 'Scott is Scott' does not, i.e. because it showed that the same entity, e.g. Scott, could be referred to by means of different senses, and that 'the author of Waverley' was one of them. Russell, however, argued against Frege's proposal that it neither explains what the object referred to by 'Scott' and 'the author of Waverley' really is, nor even that, given Frege's distinction, the sense of the expressions is what was meant. Russell rightly pointed out that even if it was indicated explicitly that one was talking about the sense of an expression, e.g. 'the sense of "Scott" is the same as the sense of "the author of Waverley"', the resulting sentence would not express what is meant by saying that Scott is the author of Waverley. Therefore, Russell thought that if we adhered to Frege's doctrine, we would get into an 'inextricable tangle' trying to sort out what a proposition asserting identity between Scott and 'the author of Waverley' expresses.

B. Reported Speech: Quotations and Oratio Obliqua.

The difficulties arising from the classification of denoting expressions as genuine referring expressions, i.e. names which are sometimes called 'Russellian names', were not the only reasons why Russell objected to Frege's theory of meaning. The problem with Frege's doctrine of the distinction between sense and reference was that it turned out quite incoherent when applied to expressions in direct quotation or sentences in indirect speech. The difficulty stems from Frege's assumption that in direct quotation, the expression indicates its reference (Bedeutung), and when it occurs in oratio

obliqua, it refers to its sense (Sinn). Consequently, it can be said - and this is the point of Russell's objection, that the question which George IV allegedly asked: 'Is Scott the author of Waverley?', is quite a different question from the one which is reported in a statement: 'George IV wanted to know whether Scott was the author of Waverley'. This puts further strain on the distinction between the sense and reference of the expressions used in oratio obliqua and oratio recta, for neither the question whether Scott is Scott, nor the reported statement about the sense of 'Scott' being the same as the sense of 'the author of Waverley', is what the king really wanted to know, i.e. whether Scott wrote Waverley.

Russell offered his own argument against Frege's doctrine which was to show that the distinction between sense and reference of a denoting complex was wrongly conceived. He argued that if one agreed with Frege that a denoting phrase had sense as well as reference or, in Russell's terminology - meaning and denotation, there should be a logical connection between the expression's sense and its reference. Russell's argument was to show whether such connection could be established, i.e. whether it can be shown that the meaning of an expression denotes the denotation, or whether the relation between the expression's meaning and its denotation (Frege's sense and reference) is merely, as Russell put it, 'linguistic through the phrase'.

Russell argued that the problem with the denoting expression, e.g. 'the first line of Gray's Elegy' was, that when we speak of its meaning and denotation without putting the expression in quotation marks, we speak about the meaning and denotation of 'The curfew tolls the knell of parting day', and this is not what we meant. It may be, Russell argued, that we ought to put the expression in quotation marks. But, when the whole expression is

enclosed within quotation marks, the denotation of: 'the first line of Gray's Elegy' is: 'the curfew tolls the knell of parting day' and it is not clear at all what exactly its meaning should be. For if we say that the meaning of 'the first line of Gray's Elegy' is the first line of Gray's Elegy, we shall be equating meaning with denotation, which is not correct, since even if 'The curfew tolls the knell of parting day' were not the first line of Gray's Elegy, the meaning of 'the first line of Gray's Elegy' would remain the same. What seems needed is a phrase which differs from 'the first line of Gray's Elegy' and which denotes not what 'the first line of Gray's Elegy' denotes but what 'the first line of Gray's Elegy' means. Further, this new denoting expression has to mean not what 'the first line of Gray's Elegy' means, but what 'the meaning of "the first line of Gray's Elegy"' means. However, even then, the new phrase does not express what was required, i.e. that 'the first line of Gray's Elegy' and 'the meaning of "the first line of Gray's Elegy"' have different meanings but the same denotation, and not different meanings and different denotations, which is what we got. It seems then, that the last possibility would be to conceive of the meaning of 'the first line of Gray's Elegy' as a different entity altogether from the first line of Gray's Elegy. This would, however, make the expression, and its relation to the first line of Gray's Elegy, 'wholly mysterious', as Russell pointed out. (I have followed here Ayer's elucidation of Russell's argument in Russell and Moore, 1971)

Russell's argument against Frege's doctrine was aimed to show that there are difficulties in establishing a necessary connection between the sense and reference of a denoting complex. For whenever a denoting expression occurs as a grammatical subject of a proposition, the proposition is about what the expression denotes, and if

we want to talk about the meaning of the expression, i.e. 'the meaning of "the first line of Gray's Elegy"', we can only talk about the meaning, if any, of the denotation, which again is not what we intended. Thus, Russell thought he established that Frege was wrong to suppose that the distinction between sense and reference can be applied to denoting expressions. But he also argued that the real cause of difficulties for Frege's theory was that he wrongly believed that denoting expressions function in a proposition as genuine referring expressions. Russell was not prepared to accept Frege's solution to the problem of what appear as non-referring names by providing them with an artificial reference. Neither was he prepared to give up his fundamental assumption that the meaning of a name is to be identified with the object which it designates. What was needed, Russell thought, was a theory which would consistently adhere to his view of names as genuine referring expressions and which would also explain the logical function of those expressions of language which do not indicate any real entities and yet can occur as a proper grammatical subject in a proposition. This theory would have to make a strict distinction between genuine names which stand in a proposition for real entities, and pseudo-names, i.e. words which denote nothing particular in the world. Thus, the theory which Russell proposed in 'On Denoting' can be regarded as a consistent development of his doctrine of names.

3. The Theory of Descriptions.

The theory of descriptions which Russell proposed in order to explain the logical function of denoting expressions, challenged the traditional classification of descriptions, together with proper names, as referring expressions. Its aim was to show that some expressions which, for example, Frege took for proper names, were not names at all, but

'incomplete symbols'. Russell thought that these expressions had no meaning by themselves but they contributed to the meaning of sentences in which they occurred as a grammatical subject. He wanted to show that a denoting phrase had, indeed, a grammatical function in a sentence, but it was not a logical constituent of a proposition; it was an 'incomplete symbol' and was contextually eliminable. Russell's theory of descriptions postulated that any sentence in which a descriptive phrase is used, for example, 'The present king of France', could be re-formulated in such a way, that it no longer contained this expression. To defend this view, Russell proposed in 'On Denoting' a method of reducing any proposition in which a denoting phrase occurs, to propositions which no longer contained it.

The elimination of descriptive phrases, i.e. showing them as incomplete symbols, consists in expanding the sentences in which they occur into existential statements, construed in such a way, that they assert whether there is something, or just one thing, which has a property contained in the description. Russell achieved this by introducing as primitive the concept of a propositional function being always true, in terms of which everything else can be defined. Thus:

'Everything has the property f' means 'fx is always true';

'Nothing has the property f' means '"fx is false" is always true'.

'Something has the property f' means 'It is false that "fx is false" is always true', which can be simplified as saying: 'fx is sometimes true'.

This gives us the pattern for dealing with indefinite descriptions, according to which, 'All men are mortal' can be re-formulated as meaning: if anything is a man, it is mortal, which states that '"if x is human, x is mortal" is always true'.

The pattern for the analysis of sentences containing definite descriptions differs from the above, for it is necessary to stipulate that the function is true for only one value of the variable. Russell achieved this by supplementing the formula with a condition which says that it is always true of any object y , that if y satisfies the function in question, then, y is identical with x . Then, the proposition 'Scott is the author of Waverley' can be explained as saying: 'It is sometimes true of x that x wrote Waverley, that it is always true of y that if y wrote Waverley, y is identical with x , and that Scott is identical with x '.

In Principia Mathematica the whole procedure was much simplified by the use of quantifiers:

' fx is always true' becomes: 'for all x , fx ';

'" fx is false" is always true' takes the form of:

'for all x , not fx '; and

' fx is sometimes true' becomes: 'there is an x such that fx '.

The simplified procedure brings out more clearly the feature of denoting expressions of which something is predicated, which was not immediately obvious in its earlier form proposed in 'On Denoting', i.e. that the statements containing descriptive phrases, are existential statements asserting existence of the object of predication contained in the description. Thus, 'The present king of France is bald' does not assert the existence of a non-entity which is the present king of France, but merely, that just one thing has the property of being France's king and whatever has this property, has also the property of being bald. In this case, nothing has the property of being France's king and therefore, it is also false to say that it is bald.

Russell also pointed out that, when a sentence is used in indirect discourse, the meaning of the whole sentence, i.e. its truth value, might differ according to

whether the denoting expression has a primary or secondary occurrence. The secondary occurrence is when a denoting phrase occurs in a proposition which is a mere constituent of another proposition. This distinction becomes more evident in a symbolic language, for when a descriptive phrase has a primary occurrence, the quantifier which governs the existential statement into which the sentence containing the phrase is translated, applies to the whole statement.

The distinction between primary and secondary occurrence enabled Russell to deal with the logical status of denoting expressions which do not denote anything particular in the world. The lack of the satisfactory means of dealing with this problem was, after all, one of his main criticisms of Frege's theory. It became possible now to explain that if the proposition: 'The present king of France is bald' asserts that just one thing has the property of being France's present king, and whatever has this property has also the property of being bald, then, when the property of being France's present king belongs to no term, or does not belong uniquely, it follows that it is false that the present king of France is bald. However, 'the present king of France is not bald' can be interpreted in two ways and this is where Russell pointed out the significance of the distinction between the primary and the secondary occurrence.

When 'the present king of France' has a primary occurrence, the word 'not' negates only the predicate and the statement 'the present king of France is not bald' is false when it means that there is an entity which is now a present king of France and it is not bald. But when 'the present king of France' has a secondary occurrence, e.g. when the negation is applied to the whole statement, then the sentence is true, for it means that it is not the case that there is present king of France who is bald.

According to the same pattern, Russell could then deny

the existence of the whole host of non-entities, e.g. 'the difference' between A and B , when A and B do not differ, or, 'the round square' as well as the existence of fictitious characters like unicorns or Apollo. For the propositions in which these expressions occur can be interpreted according to the same rules as denoting phrases, i.e. if a phrase has the primary occurrence, the proposition containing this phrase is false, but if its occurrence is secondary, the proposition may be true. In this way Russell liberated the theory of meaning from the problems posed by Meinong's non-existent individuals and the ghostly members of Frege's null-class. He showed that Meinong and Frege were wrong to think that all the expressions which could function as a grammatical subject of a proposition were logically proper names. He showed that definite and indefinite descriptions, were not genuine referring expressions, and could not be regarded as proper names at all. They were 'incomplete symbols' and the propositions in which they occurred were existential statements from which these expressions could be eliminated.

4. Russell's Theory of Names.

A. The Principle of Acquaintance and Logical Atomism.

The theory of descriptions was the result of Russell's objection to the traditional classification of denoting expressions as genuine referring expressions. It was designed to show that some expressions were wrongly classified as genuine names merely because of their grammatical function. Russell claimed that although a denoting phrase could, indeed, occur as the grammatical subject of a perfectly meaningful proposition, it was not a genuine proper name and could never be regarded as a logical subject. It is evident that the theory was the result not only of Russell's refusal to consider denoting expressions as genuine names but it was a consistent

development of even more fundamental assumption about the nature of the category of referring expressions, and language in general.

The views which Russell expressed in 'The Philosophy of Logical Atomism' were founded on a distinction between genuine objects, i.e. 'atoms' of reality, and logical fictions or constructions. The contrast between them was specified by the principle of acquaintance which Russell mentioned at the end of 'On Denoting' and which was given a full statement in the essay 'Knowledge by Acquaintance and Knowledge by Description'.

The principle specifies that we are acquainted with something when we are directly aware of it 'without the intermediary of any process of inference or any knowledge of truth'; it postulates the objects of acquaintance as 'things immediately known, just as they are'. Russell named these objects 'sense-data' and described them as things which make up the appearances of physical objects, the real atoms of reality, the genuine entities whose existence was assured by our direct acquaintance with them.

The principle of acquaintance also implies that 'every proposition which we can understand must be composed wholly of the constituents with which we are acquainted'. It means that in the analysis of a proposition, we must come at the end to words whose meaning can only be learnt by acquaintance with the genuine entities, or particulars, which the words represent in a sentence:

All analysis is only possible in regard to what is complex and it always depends, in the last analysis, upon direct acquaintance with the objects which are the meanings of certain simple symbols. (Russell, 1918, p.194)

This requirement constitutes the central idea of Russell's philosophical atomism, because only if we suppose that

there are such ultimately unanalysable names whose meanings are objects of direct acquaintance, is the logical analysis of propositions, on which the Logical Atomism was founded, at all possible. Without the definitional base which the objects of acquaintance constitute in Russell's atomism, and in terms of which all other expressions (with the exception of logical constants which have a different function in a proposition) can be defined, nothing significant could be said about the world. For even general terms like 'unicorn' or 'sea-serpent' can be understood only because we know the sense data, the 'atoms' out of which these fictions are constructed. Similarly, Russell argued, we can grasp the meaning of singular terms, e.g. Apollo or Pegasus, because the definitions, or propositions expressed by sentences in which these terms occur, can be analysed back to terms whose meaning was learnt by acquaintance. All analysable singular and general terms can be understood only because analysis terminates with the words which admit no further analysis and whose meaning is learnt by acquaintance. In this way the principle of acquaintance ties with the most fundamental doctrine of Russell's logical atomism, for logical analysis depends ultimately on acquaintance as the only way in which one can grasp the meaning of unanalysable terms. Without the definitional base which unanalysable expressions provide, and without the principle of acquaintance which specifies the semantic function of names, the logical analysis of sentences expressing propositions would make no sense.

B. Proper Names.

The principle of acquaintance made Russell postulate that the only things that can be named are sense - data, i.e. things known to us by direct acquaintance. As a result of a strict adherence to the principle, he was forced to say that the words which one usually thinks of as naming

words, e.g. 'Socrates', or 'Piccadilly', are not genuine proper names, for neither 'Socrates', nor 'Piccadilly' name any real particular with which one is directly acquainted. The names 'Socrates' and 'Piccadilly', Russell claimed, could only be understood in so far as one understood a relevant description of the form 'the so-and-so', e.g. 'The Greek philosopher who drank hemlock', or, 'The street between Haymarket and Hyde Park Corner'.

Although, surprisingly, Russell sometimes speaks of 'Scott' as a name (Russell, 1918, p.252 and 253), the view which he held at that time was, that ordinary proper names function as abbreviated descriptions. He did not deny that words like 'Piccadilly' can form part of many meaningful propositions, for they do quite legitimately occur as the grammatical subjects of many sentences. He only argued that since the facts which correspond to these propositions do not contain any real constituent corresponding to the name standing in the subject-place, 'Piccadilly' and 'Socrates' cannot function as a logical subject. According to the theory which he proposed, when the names like 'Piccadilly', or 'Socrates' are properly analysed, it will become obvious that they do not stand for any real particular but merely for logical constructions like series and classes:

'Piccadilly', on the face of it, is the name of a certain portion of the earth's surface, and I suppose, if you wanted to define it, you would have to define it as a series of material entities, namely those which, at varying times, occupy that portion of the earth's surface. So that you would find that the logical status of Piccadilly is bound up with the logical status of series and classes, and if you are going to hold Piccadilly as real, you must hold that series of classes are real, and whatever sort of metaphysical status you assign to them, you must assign to it. As you know, I

believe, that series and classes are of the nature of logical fictions. (Russell, 1918, p.191)

As the essential function of any name is to identify an object which it names, Russell came to the conclusion that the names, which we usually regard as proper names, could not be genuine referring expressions if all that they named were series and classes. 'Piccadilly' and 'Socrates' appear to be just abbreviations for some complex entities which, on analysis, can be shown to dissolve Piccadilly and Socrates into fiction, an aggregate of some descriptions. Thus, if the logical function of a name is to refer uniquely to an existent particular, and if this particular can only be identified by direct acquaintance, Russell was forced to admit that no ordinary name could satisfy these conditions for no ordinary proper name named any object of direct acquaintance.

However, the problem is not quite straightforward, for it seems that Russell did not completely rule out the possibility that the words which are commonly regarded as proper names could be identified with their bearers. In the sixth lectures on 'The Philosophy of Logical Atomism', Russell surprisingly suggested that an ordinary proper name could be used 'as a name':

'Scott' taken as a name has a meaning all by itself.

It stands for a certain person, and there it is.

(Russell, 1918, p.253)

His statement implies that 'Scott' can be the subject of a proposition in a different way than a description. In fact, this is what Russell explicitly said in the preceding paragraph:

It is of the utmost importance to realize that 'the so-and-so' does not occur in the analysis of propositions in whose verbal expression it occurs, that when I say 'The author of Waverley' this is not the subject of that proposition in the sort of

way that Scott would be if I said 'Scott is human', using 'Scott' as a name. (Russell, 1918, p.251)

As both the name 'Scott' and the descriptive expression 'The author of Waverley' can occur as the grammatical subject of a proposition, it must be that Russell meant here the logical subject. Hence, it is possible to interpret what he said as meaning not only that 'Socrates' stands for Socrates but, more generally, that unlike a description which does not refer to whatever object, if any, it describes, an ordinary proper name can genuinely refer to its bearer. This would mean that most of what we commonly call 'names' are, after all, names, regardless of whether they satisfy the principle of acquaintance, or not. However, it must be stressed that this conclusion conflicts with the usual interpretation of Russell's account of names in 'The Philosophy of Logical Atomism' where the main line of argument is that the ordinary proper names stand for logical fictions.

C. Logically Proper Names.

The view that names, which we commonly use as referring expressions, are to be considered as mere abbreviations for some descriptions, raises a question about what is to count as a logically proper name. Russell not only required that a logically proper name uniquely identified an existent entity but he also believed that the only entities which could be identified by logically proper names were the particulars with which one was directly acquainted. The problem was that the only expressions which would approximate this conception of a genuine proper name were the demonstratives 'this' and 'that'. Although Russell admitted that 'this' and 'that' are ambiguous names, for they mean different things at different time and place, they are, nevertheless, the only expressions which can be thought of as genuine proper names in the sense required by his theory of meaning and

the principle of acquaintance:

The only words one does use as names in the logical sense are words like 'this' or 'that'. One can use 'this' as a name to stand for a particular with which one is acquainted at the moment. We say 'This is white'. If you agree that 'This is white', meaning the 'this' that you see, you are using 'this' as a proper name. (Russell, 1918, p.201)

Although later, Russell admitted names of sensible qualities, e.g. 'red', 'hot', into the category of the genuine proper names, this does not rescue his theory of names from the conclusion that naming is a semantic function of a very few words indeed.

IV. WITTGENSTEIN'S PICTURE THEORY OF MEANING.

1. The Picture Theory of Representation.

The idea of picturing as a form of representation constitutes the central doctrine of Wittgenstein's theory of meaning in the Tractatus. The picture theory does not only concern propositions but was also meant to apply to all forms of representation. It should therefore be regarded as a general theory of representation. Propositional representation, known as the 'picture theory' of propositions, is a special example of the theory of representation which Wittgenstein discussed briefly at the beginning of the Tractatus, before he applied it to propositions. Its main purpose was to clarify the nature of propositions, for Wittgenstein thought that finding an answer to the general question of how any representation is possible would lead to the solution of a more specific problem, i.e. how language is possible. 'What makes a picture an accurate or inaccurate representation of reality?' is a question which in the Tractatus is prior to: How language is possible?

For any picture to represent reality, it is necessary that the elements which make it a picture correspond to objects which they represent. But a picture is not just a random collection of the representatives of objects. In order that the picture depicts truthfully a piece of reality, the elements of a picture have to be arranged in a special way which corresponds to the relations between the objects which they represent. When the arrangement of the elements of a picture does not correspond to the arrangement of objects which they represent, then, of course, the picture is false. Wittgenstein calls the determinate way in which the elements of a picture are related to one another 'the structure of a picture' and

the possibility of this structure 'the pictorial form of a picture'.

A picture has to have something in common with what it represents in order to depict it either accurately or inaccurately and the common pictorial form is what makes it possible. It is how a picture is attached to reality, Wittgenstein says: 'it reaches right out to it'. (T.2.1511). A pictorial form is what makes it possible for a picture to represent any reality whose form it has. For instance, a spatial picture can depict anything spatial, a coloured one anything coloured. (T.2.171) Different pictures, or models can have different forms since what Wittgenstein means by pictures is not restricted only to two-dimensional representations. In fact, he proposes that anything which represents what it depicts by means of a common pictorial form could be regarded as a picture:

A gramophone record, the musical idea, the written notes, and the sound waves, all stand to one another in the same internal relation of depicting that holds between language and the world. (Wittgenstein, T.4.014)

A picture, however, has not only a pictorial form in common with what it depicts. If a picture represents anything, and in any way at all, it must share a common logical form with what it represents; it has to have identical multiplicity and ordering with what it is a representation of. A logical form can be regarded as a common pattern shared by the elements of a picture and what it depicts; it is the 'form of reality'. (T.2.218) Since every picture, Wittgenstein says, must have a logical pattern in common with what it depicts, a logical form constitutes part of a pictorial form of every picture.

However, a picture represents only a possibility of existence or non - existence of a state of affairs, for

it conveys its sense without disclosing whether it represents reality correctly or incorrectly. (T.2.201) Its sense is independent of its truth and falsity. (T.2.22) Wittgenstein says in the Tractatus that the agreement, or disagreement of the sense of a picture with reality is entirely an empirical matter:

In order to tell whether a picture is true or false we must compare it with reality. (Wittgenstein, T.2.223)

If things are as the picture represents them, then, it is a true picture; when they are not, then the picture is false. But the only way to judge whether the picture depicts correctly, or not, is to compare it with how things are, for 'no picture can be true a priori'. (T.2.225)

The considerations of the general nature of picturing precede in the Tractatus the theory of propositions to which it also applies. The theory explains the nature of representation by means of the doctrine of structural isomorphism, i.e. one-to-one correspondence of the 'form and the relations' between a picture and what it depicts. It, therefore, requires that the elements of a picture, as well as the elements of any possible state of affairs which the picture represents, stand in a determinate relation to one another. It explains the nature of representation by postulating that a model, or a picture, is a representation of reality in virtue of being made up of elements which stand, one-by-one, for the objects which constitute a possible state of affairs. Pictorial representation consists of a correspondence between the configuration of objects on one side and on the other, the elements of a picture arranged to mirror the relations between the objects.

As it is essential for an object to occur in a state of affairs, it is also necessary for the corresponding elements of a picture to be arranged in a determinate way

to constitute a picture. (T.2.14) It is the arrangement of the elements that gives the picture its sense. Thus, it can also be said that the elements of a picture cannot depict anything by themselves. It is their arrangement which, given a common 'mode of projection', makes them into a picture of a possible state of affairs.

Wittgenstein's pronouncements about the nature of the world invite a certain interpretation of the doctrines which follow these pronouncements. Wittgenstein said that the elements of a picture are representatives of objects. (T.2.131) This implies that the existence of objects is necessary for the picture theory of representation to make sense. It can also be said that Wittgenstein's statements about the nature of objects support the main principle of logical atomism which he employed to explain the theory of representation. For the idea of terminable analysis and the structural isomorphism between a picture and what it depicts implies that, at the end of analysis, we must arrive at the objects which are the ultimate simples of reality.

The existence of simple objects, i.e. the residue of a complete analysis, appears to be intimately connected with the picture theory of representation and the principle of logical atomism. The plausibility of the theory seem to depend on the existence of objects which are required to substantiate the doctrines of isomorphism and terminable analysis. However, in view of some statements which Wittgenstein made about objects, it is also quite possible to argue that the existence of such objects is, at least, doubtful.

For instance, the most conspicuous feature of an object is its lack of individuality and independence outside the state of affairs into which it combines with other objects. As objects occur only in combination with some other objects, and as it is also impossible to think of any criteria by which one can identify them, it is

quite possible to argue that no such a thing as an object can be distinguished. This may well be the reason why Wittgenstein gave no example of any object and may also explain the corresponding difficulties with identifying the particular elements of a picture. It looks as if there is something holistic about a picture which loses its meaning as soon as the question of its parts arises.

The same difficulties arise when Wittgenstein applies his theory of pictorial representation to language. This is not unexpected since he already proposed to regard propositions as pictures and names as the representatives of objects. In fact, there is a striking similarity between the only way one can think of objects and the only way one can talk about the meaning of names. Frege's contextual principle, which Wittgenstein incorporates in the theory of meaning in the Tractatus, expresses this particular difficulty:

Only propositions have sense; only in the nexus of a proposition does a name have meaning. (T.3.311)

The problems concerning the nature of names and propositions, which the principle spells out, is parallel to the difficulties raised earlier by the nature of objects. For as objects appear inconceivable outside a state of affairs, names have no meaning by themselves; they have meaning only when combined with other expressions in a proposition. Thus, the peculiar nature of objects is transferred, via Frege's principle, from the ontological theory to its linguistic counterpart.

It can be argued that the reason why Wittgenstein did not give any example of simple objects is that no example could be given. For although he insisted on the existence of simple objects at the beginning of the Tractatus, he argued later that the word 'object', just like 'complex', 'fact' or 'function' signifies a formal concept represented in a conceptual notation by variables, not by functions or classes, as Frege and Russell

believed:

Every variable is the sign for a formal concept. For every variable represents a constant form that all its values possess, and this can be regarded as a formal property of those values. (T.4.1271)

Thus the variable name 'x' is the proper sign for the pseudo-concept object. (T.4.1272)

This argument can be used to support the view that there can be no objects in the sense required by the picture theory of representation seen from the background of logical atomism. Although it is contrary to the usual interpretation of Wittgenstein's picture theory of propositions to question the existence of objects, it may seem that there are some inconsistencies as regards their nature which justify the view that the Tractatus presents a confusing idea of objects. Some even argue that the notion of subsistent simple objects in the Tractatus is quite incoherent. (P.M.S. Hacker, 1974)

2. The Objects in the Tractatus.

According to the usual interpretation of the ideas which Wittgenstein presented in the Tractatus as the 'picture theory' of propositions, the objects are simple entities which are the residue of analysis. Their existence is necessary for the theory of representation to make sense and for this reason they play the fundamental role in the strategy of the general account of meaning in the Tractatus. Wittgenstein proposed to explain the sense of compound propositions in terms of truth - values of elementary propositions and the sense of elementary propositions in terms of isomorphic representation and the principle of logical atomism. These, in turn, depend on the existence of simple objects. 'In a proposition a name is the representative of an object' Wittgenstein said (T.3.221) and then he added that a name is a primitive sign which cannot be dissected any further. (T.3.26) Thus,

the possibility of simple signs is necessary in order that sense be determinate.(T.3.23)

Wittgenstein argued that the existence of simple objects is a logical necessity:

It seems that the idea of the simple is already to be found contained in that of the complex and in the idea of analysis and in such a way that we come to this idea quite apart from any examples of simple objects, or propositions which mention them and we realize the existence of the simple objects - a priori - as a logical necessity. (Wittgenstein, Notebooks, p.60)

The picture theory of propositions presupposes then the existence of objects as complete and independent simples of reality. Without the simple objects nothing that Wittgenstein wished to say about language and its connection with the world could be said. For if the simple objects did not exist, the propositions of language would have no definite sense; there always would be another proposition on which the sense of the previous one depended. Thus, the requirement for the simple objects is a condition which safeguards the definiteness of the sense of propositions.

There is no doubt that the usual interpretation of Wittgenstein's picture theory of propositions requires commitment to subsistent simple objects as the meanings of expressions combined into atomic propositions. However, there seems to be a discrepancy between the usual interpretation of Wittgenstein's ideas and what he actually says in the Tractatus about the nature of objects and later, about the nature of names as their representatives in a proposition. This discrepancy calls for questions which on some interpretation may undermine the plausibility of the usual interpretation of the picture theory. Therefore, it seems necessary to examine more carefully what sort of things Wittgenstein says about objects and how what he says fits with the general

theory of representation and the theory of propositions.

In the Introduction to the Tractatus Russell described Wittgenstein's objects as entities which can only be mentioned in connection with some definite property:

We can say 'there are more than three objects which are human', or 'there are more than three objects which are red', for in these statements the word 'object' can be replaced by a variable in the language of logic, the variable being one which satisfies in the first case the function 'x is human'; in the second the function 'x is red'.

(Wittgenstein, T.XVII)

However, when this description is compared with what Wittgenstein says about the objects, it becomes apparent that while the first part of Russell's statement is right, i.e. that we cannot talk about the individual objects, the objects which he talks about in the latter part are not Wittgenstein's but his own. This is even more evident in the earlier statement, when Russell says that the world is not described by merely naming all the objects in it, but, that it is also necessary to know the atomic facts of which these objects are constituents. (Wittgenstein, T.X111) These statements prove that Russell thought that Wittgenstein's objects were like his own 'individuals', i.e. the entities referred to by names, 'things' of the 'outer world'.

It is true that in The Philosophical Investigations Wittgenstein compared Russell's 'individuals' to the objects in the Tractatus but it is not quite obvious that he was correct in making this comparison. (Wittgenstein, P.I. 46) Kenny pointed out that Wittgenstein was not always exact in representing his earlier work. (A.Kenny, 1974, p.4) It is also true that while Wittgenstein says: 'objects can only be named', he is always careful not to suggest that a name can have meaning outside a proposition, or, that an object can exist outside a state

of affairs.

Wittgenstein gave no examples of either objects or states of affairs in which objects occur, although he devoted many paragraphs in the Tractatus to the arguments concerning their logical status. The objects, or things, as he first referred to them, constitute states of affairs. (T.2.01) Their necessary feature is the capacity to combine with other objects into configurations which constitute states of affairs. Wittgenstein says: 'there is no object that we can imagine excluded from the possibility of combining with others.' (T.2.0121) All the possibilities of the object combining into the possible states of affairs constitute the nature of the object. 'Each object is, as it were in a space of possible states of affairs' (T.2.013) Then he adds: 'This space I can imagine empty but I cannot imagine the thing without the space.'

These statements imply that objects are necessarily incomplete, for they cannot even be imagined as independent entities subsisting outside the states of affairs in which they combine with other objects. It is true, that this makes it difficult to think of a sense in which an object can be simple. However, this interpretation does not support Russell's view expressed in the Introduction to the Tractatus, i.e. that objects can only be mentioned in connection with some definite property. There is strong evidence that Wittgenstein thought that properties and relations are also to be regarded as objects. He stated this clearly in the Notebooks 1914-1916 where he wrote : 'relations and properties are objects too' which he followed with the explanation that objects are not all of one and the same logical kind. (Nb., 61,70)

Wittgenstein's proposal to regard properties and relations as objects may also explain his statement in the Philosophical Grammar where he said that a fact is a

complex of objects. (P.G.1, sec.20,p.53) This is also consistent with his remarks to Desmond Lee about the first sentences of the Tractatus:

A proposition is not two things connected by a relation. 'Thing' and 'relation' are on the same level. The objects hang as it were in a chain. Russell was, therefore, wrong to think that Wittgenstein's objects are the entities referred to by the names in a proposition. Nevertheless, he was right to say that an object can only be mentioned in connection with another entity, though he thought of it as a property and not as another object.

The analogy between objects and the links in a chain appeared first in the Tractatus in 2.03 where Wittgenstein described states of affairs as a configuration of objects standing in a determinate relation to one another. Although in the Philosophical Grammar, he criticised this analogy, it seems to me that the analogy illustrates a much simpler and straightforward point.

By comparing objects in a state of affairs to links which make up a chain, Wittgenstein wanted to illustrate the idea that the necessary feature of an object is its possibility of combining with some other objects. I have already mentioned that on some interpretations this idea can be thought of as inconsistent with Wittgenstein's other doctrines. For if objects can only be imagined in combination with other objects, they cannot be thought of as simple and autonomous, but as essentially incomplete, in Frege's sense, 'unsaturated'. This does make them look even more like Frege's concepts than objects. P.M.S. Hacker has drew attention to this feature of Wittgenstein's objects by using a chemical analogy when he said that objects are 'valanced'. (P.M.S. Hacker, 1975, p.76)

However, thinking about the objects as 'valanced' causes problems again because of the way in which the

existence of autonomous objects is expected to be tied up with the central theses of logical atomism. In particular, the autonomy of the objects is required by the thesis of terminable analysis, which presupposes that a completely analysed proposition consists of a concatenation of names of simple objects.

In the Tractatus the objects are clearly regarded as meanings (*Bedeutung*) of simple signs employed in a proposition. (T.3.203) They are the ultimately simple things which constitute the substance of the world. (T.2.021) If they did not exist, Wittgenstein says, the world would have no substance, names would have no meaning, and the propositions of language in which such names occurred would lack sense. In fact, the whole language would be meaningless, if the truth of some propositions did not depend upon their agreement with objectively existing reality. If objects did not exist, then, whether a proposition had sense would, ad infinitum, depend on whether another proposition was true. Thus, it appears necessary that a fully analysed proposition consists of the simple names which represent simple objects. If this requirement could not be satisfied, e.g. if words in propositions named complexes, the analysis would not terminate at propositions whose truth depended upon comparison with reality. (T.2.0212)

The non - existence of the individual objects seems to undermine the plausibility of the picture theory of representation, since its fundamental doctrine of isomorphic identity between a picture and a state of affairs requires the elements of a picture to correspond 'one by one' with the objects they represent. Thus, the existence of objects is also a necessary condition of the possibility of pictorial representation.

Yet, in spite of the need for autonomous objects, which thinking about Wittgenstein's pronouncements about the nature of the world and language from the perspective

of logical atomism implies, the objects of the Tractatus are not autonomous. Thus, it appears that the usual interpretation of the doctrines in the Tractatus presents a confusing picture of Wittgenstein's views about the world and the language. Anthony Palmer in his recently published book wrote:

This puzzlement about 'objects' in the Tractatus is related to the picture that is generally presented of Wittgenstein as someone who, through his conversations with Russell, produced in the Tractatus a version of Russell's logical atomism, just as Russell himself acknowledged that the lectures he gave under the title of 'Logical Atomism' were greatly influenced by the conversations he had had with Wittgenstein. (A. Palmer, 1988, p.44)

I think that the interpretation of Wittgenstein's views in the Tractatus from the perspective of a philosophy of logical atomism, 'in anything like Russell's sense', does produce a confusing picture of these views. But it is also true that this interpretation is justified by some of Wittgenstein's own somewhat confusing statements of his views.

3.The Picture Theory of Propositions.

The theory of propositions which Wittgenstein proposed in the Tractatus was the result of applying the theory of pictorial representation to language. The idea of language as a form of depiction was founded on a well defined contrast between a name and a proposition which Wittgenstein saw as analogous to the contrast between an object and a state of affairs and elements of a picture and a picture.

In a proposition, a name represents an object; an object is the meaning of a name. (T.3.203) The characteristic feature of a name is that it stands in a one-to-one relationship to reality for it either names

something or ceases to be a significant symbol. This feature distinguishes a name from a proposition which, in contrast, has a two-fold relation to what it depicts - it can be either true or false. A proposition, however, has a sense regardless of whether it is true or false. A proposition shows how things stand, if it is true, but it does not to cease to be a proposition if it does not depict reality correctly.

The fact that a proposition can be understood without knowing whether it is true or false enables Wittgenstein to draw an analogy between a picture and a proposition. For a proposition, like a picture, can depict a possible state of affairs, i.e. it shows its sense because it has parts which are concatenated in a determinate way like the elements of a picture. Therefore, the fact that a proposition is composite, and logically articulated, must be regarded as its necessary feature. (T.3.141) The complexity of a proposition is a feature that makes it even more different from a name which is a simple sign. This is why, Wittgenstein thinks, Frege was wrong to regard propositions as complex names of the objects which he called 'The True' and 'The False'.

The requirement that the words in a proposition have to stand in a determinate relation to one another is what distinguishes a proposition from a string of words. While Frege observed that any legitimately constructed proposition must have sense, Wittgenstein goes even further and points out that any possible proposition is legitimately constructed. (T.5.4733) He is right, of course, for if a proposition is not well-formed, it loses its unity and ceases to be a proposition; it becomes a string of words which does not convey any sense.

The determinate way in which the elements are combined to form a proposition is what Wittgenstein calls its structure. The possibility of a structure is a logical form of a proposition; it is a possibility that the

elements of a proposition can be combined in accordance with the rules of logical syntax. If any expression fails to make sense, it is because, as Wittgenstein points out, we have not given a correct meaning to some of its constituents, i.e. we have failed to make a correct correlation between the constituents of a proposition and the reality. (T.5.473) As a result, a proposition becomes a piece of nonsense.

The distinction between sense and nonsense is one of the leading ideas in the Tractatus. But it can be argued that Wittgenstein's explanation of why some complex expressions fail to make sense differs from what might be called a 'natural' view. Cora Diamond suggests that in Wittgenstein there is no positive view of nonsense, i.e. there is no kind of nonsense which is nonsense on account of what the terms which compose it mean. (C.Diamond, 1981) For Wittgenstein, nonsense is a result of some determinations of meaning not being made. Therefore, the reason why, e.g. 'Socrates is identical', is a piece of nonsense is that there is no convention which has given an adjectival meaning to 'identical'. (T.5.4733) 'Socrates is identical' is not a proposition, because the constituents of this expression are not combined in accordance with the rules of logical syntax, i.e. there is no convention which allows us to use the word 'identical' predicatively as well as a sign of a relation.

Thus, it can be said that the sense of a proposition depends on its logical form and structure. This is what Wittgenstein must have meant when he said that any possible proposition is legitimately constructed. (T.5.4733) This does not mean, however, that the sense of a proposition is in any way dependent on its truth or falsity. Wittgenstein endorses emphatically Frege's distinction between the sense of a proposition and its truth-value and criticizes Russell for introducing negative facts:

It must not be overlooked that a proposition has a sense that is independent of the facts: otherwise one can easily suppose that true and false are relations of equal status between signs and what they signify. (Wittgenstein, T.4.061)

For although a proposition always describes a possible state of affairs, the state of affairs which it describes need not be what actually obtains. It is only when a proposition is compared with reality that questions regarding its truth or falsity may arise. Consequently, a proposition is true if it says that things stand in a certain way and they do, and it is false if they do not. But the only way to find out whether a proposition is true or not is by comparing it with what it describes. It means that neither a picture nor a proposition can be true a priori. (T.4.061)

Wittgenstein argued that a proposition possesses all the features in virtue of which it can be regarded as a picture: it is essentially composite, it has a form and a structure, and it can be either a true or false description of reality. He proposed that, as all the essential features in virtue of which a picture can depict apply equally well to propositions, a proposition is a picture of reality, in spite of the fact that it does not even look like a conventional picture.

In support of the view that propositions are pictures of reality, Wittgenstein pointed out that our written language has developed out of hieroglyphic script which depicted facts in a more obvious way than the present language. However, our language has retained its original pictorial nature:

In order to understand the essential nature of a proposition, we should consider hieroglyphic script, which depicts the facts that it describes. And alphabetic script developed out of it without losing what was essential to depiction. (T.4.016)

Propositions, Wittgenstein says, may no longer look like a picture, but neither do written notes look like a piece of music. (T.4.011) Nevertheless, the notes and a piece of music, a gramophone record and the sound - waves, a picture and what it depicts, stand to one another in the same internal relation of depicting that holds between language and the world.

Wittgenstein gave Russell the credit for being the first to show that many philosophical problems arise from the failure to understand how language functions and to see that the real logical form of a proposition is often different from its apparent form. This, Wittgenstein thought, accounts also for the fact that the constituents of a proposition neither look like the elements of reality which they represent, nor do they always stand in a one-to-one relation to these elements. In spite of that, propositions depict according to the same rule of projection as all the other forms of representation for language is only one of the forms of pictorial representation. The logic of depiction, Wittgenstein argued, is common to all pictorial modes of expression to which his general theory of pictorial representation applies:

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

The general theory of pictorial representation encounters, as I have argued, some serious difficulties generated by the obscure nature of objects. As the theory of propositions, which Wittgenstein proposed in the Tractatus, is the result of applying a general theory of pictorial representation to language, it is not surprising that it is also confronted by corresponding difficulties. For the picture conception of language, like the general theory of representation, depends on the doctrines of logical atomism, i.e. isomorphism and

terminable analysis. It requires that the analysis of a proposition must terminate in simple names standing for simple objects of reality. Since the names in a fully analysed proposition are representatives of objects, it strikes one as inevitable that the difficulties posed by the objects are just transferred from one theory to another.

An atomic proposition is a concatenation of names; a picture is constituted by the arrangement of its elements; a state of affairs is a configuration of objects. According to the usual interpretation, these statements require a metaphysical atom, an indestructible simple entity without which, Wittgenstein thought, no representation, and therefore no language, would be possible:

If the world had no substance, then whether a proposition had sense would depend on whether another proposition was true. (T.2.0211)

For the names in a proposition, like the elements in a picture, must be correlated with the objects combined in the possible states of affairs. These correlations of the objects with their representations are the 'feelers' with which the picture touches reality. Hence, it can be argued that the existence of objects is vital for the doctrines of atomism as well as the particular theory of meaning which Wittgenstein proposed in the Tractatus.

The picture theory of representation requires the existence of simple and independent objects which, in a fully analysed proposition, are represented by 'simple names', analogous to the elements of a picture. The requirement that simple signs are possible, Wittgenstein says, is the requirement that sense be determinate. (T.3.23) But he also regards as the essential feature of an object that it can only occur in combination with other objects. Wittgenstein's objects, I have already argued, seem inconceivable independently of other

objects. This feature is expressed by Frege's contextual principle which Wittgenstein employed in his picture theory of proposition. Like Frege, he postulates that only in the nexus of a proposition has a name meaning.

The employment of the contextual principle shows that the enigma of objects finds its reflection in the theory of the proposition. It has been argued, however, that Wittgenstein's pronouncements about the nature of the world, both historically and logically, should follow those about language, and not the other way round, as the order in which they are presented in the Tractatus suggests:

Both historically and logically the theses about the world follow those about the language, but their dependence is masked by their presentation the beginning of the book. (A.Kenny, 1973, p.72)

According to Kenny's suggestion, it is more correct to say that the difficulties we have with the proper understanding of our language are also responsible for our inability to form a consistent theory about the world. Although in his book, Kenny presents Wittgenstein's views as a version of logical atomism, his suggestion of a 'logically and historically' more correct order of the presentation of Wittgenstein's views may just offer a right approach. I have argued that there is a disagreement between the usual interpretation of Wittgenstein's views presented at the beginning of the Tractatus and some of the important statements which he made there regarding the logical status of objects. If it is a mistake to interpret Wittgenstein's views with the doctrines of logical atomism in mind, then we can put aside the obscure nature of objects and see whether Wittgenstein's Tractatus can be more successfully approached from a different perspective.

4.Names and Objects.

When Wittgenstein discusses names in the Tractatus, he often refers to them as 'simple signs'. It has been pointed out, however, that by 'simple signs' Wittgenstein does not mean what is normally meant, i.e. signs which do not have significant parts. He means that simple signs are the signs of simple objects. (A.Kenny, 1973, p.80) Wittgenstein argues:

When a propositional element signifies a complex, this can be seen from an indeterminateness in the propositions in which it occurs. In such cases we know that the proposition leaves something undetermined. In fact the notation for generality contains a prototype. (T.3.24)

Although it is not entirely clear what Wittgenstein means by an 'indeterminate sense', he must have meant at least that unless the meanings of simple signs are themselves simple and determinate, the analysis of a proposition would never terminate conclusively. Therefore, if the analysis must come to an end there must be signs which cannot be dissected any further and the meanings of these signs must themselves be simple. This is what Wittgenstein insists on in the Tractatus, though in the Notebooks 1914-1918, he was seriously worried about the idea of a complete analysis and the simplicity of objects. For instance, on the 12th October 1914, he wrote that a completely analysed proposition contains as many names as there are things contained in its reference, but on 24 May, 1915, he wrote :

We single out a part of our visual field, for example, and we see that it is always complex, that any part of it is still complex but is already simpler, and so on -. (Wittgenstein, Notebooks 1914-16, p.50)

Later, however, he thought that a fully analysed proposition would contain as many names as the number of

known elements in the state of affairs which it depicts:

What I mean is: if, e.g. I say that this watch is not in the drawer, there is absolutely no need for it to FOLLOW LOGICALLY that a wheel which is in the watch is not in the drawer, for perhaps I had not the least knowledge that the wheel was in the watch, and hence could not have meant by 'this watch' the complex in which the wheel occurs.

(Wittgenstein, Notebooks 1914-16, p.64)

By saying that the watch is not in the drawer, one does not need to mean that every element which makes up the watch is in the drawer too. In the analysis, Wittgenstein thought, it is sufficient that only one's own meaning was completely analysed.

The problem of complexity remains inconclusive in the Notebooks though later, in the Tractatus, Wittgenstein argues that a completely analysed proposition consists of simple signs which stand for the simple objects of reality. In Kenny's opinion, however Wittgenstein does not so much resolve as skirts round these problems, as he finally decides, that in a fully analysed proposition there are as many simple signs as there are corresponding objects (T.3.2 -3.201) and that a proposition has one and only one complete analysis.(T.3.25)

The problems connected with the notion of simplicity in the Tractatus raises questions regarding the nature of analysis and the interpretation of the contextual principle which Wittgenstein incorporated in the Tractatus. The principle says that names have meaning only when they occur as the constituents of a proposition, i.e. they have no meaning on their own. Yet in a fully analysed proposition one would have to arrive at the simple signs representing simple objects. Wittgenstein was worried about the idea of a complete analysis when he wrote in the Notebooks :

My difficulty surely consists in this: In all the

propositions that occur to me there occur names, which, however, must disappear on further analysis. I know that such a further analysis is possible, but am unable to carry it out completely. In spite of this I certainly seem to know that if the analysis were completely carried out, its result would have to be a proposition which once more contained names, relations, etc. (Wittgenstein, Notebooks 1914- 16, p.61)

It seems that Wittgenstein considers here a possibility when the analysis of a proposition does not terminate in names but in another proposition. This may lead us to a similar interpretation implied in the context principle which Wittgenstein discussed in the Tractatus.

Any expression which occurs as a constituent element in a proposition, Wittgenstein argues, presupposes the forms of all the propositions in which it can occur. Therefore, he says, it can be regarded as a common characteristic of the whole class of possible propositions and can be presented by means of a general form of a proposition in which this expression represents the common element. In a general form, which is conventionally presented as 'fx', the expression is the constant element while everything else can change. For instance, there can be a class of propositions whose sense is characterized by the common expression, '...is wise'. This class includes all the propositions of the form 'x is wise', and can be represented by means of a general form 'fx' where 'f' stands for the constant expression '...is wise' and 'x' represents what is variable in the proposition. The expression '...is wise' is thus presented by means of a variable proposition 'x is wise' whose values are propositions containing this expression, e.g. 'A is wise', 'B is wise' etc.(T. 3.3-3.314)

The argument is followed by another statement of the contextual principle, i.e. that an expression has

meaning only in a proposition. However, this is not the conclusion of the argument, for Wittgenstein realizes that any part of a proposition can be construed as a propositional variable - 'even the variable names'. Consequently, he presses the argument further and points out that the values of the resulting variable proposition can be given only by means of other propositions which have the variable as their common characteristic. Thus, turning a constituent of a proposition into a variable, results in a class of propositions, all of which are values of the resulting variable proposition. (Wittgenstein, T.3.3-3.315)

Wittgenstein's argument that expressions are variables and all variables are propositional variables or variable propositions, prevents one from having to talk about the 'constituents' or 'parts' of a proposition, in any sense which requires the itemising account of language which e.g. involved Russell in insuperable difficulties. If the constituents of a proposition are not identifiable independently of the propositions in which they occur, then the whole problem with the ineffability of objects must also disappear. For the idea that an expression which contributes to the sense of a proposition is itself a proposition implies the conception of objects which must be inconceivable independently of the states of affairs into which they combine with other objects. Thus, to approach Wittgenstein's views in the 'historically and logically' correct order, we can reverse the argument and try to make sense of the ineffability of objects outside the states of affairs from the perspective of language in which we make sense of the world.

Wittgenstein returns again to the ineffable nature of objects in the argument about the formal concepts and concepts proper which was already mentioned earlier in this chapter. The argument is very obscure, but nevertheless, the point it makes is quite clear. Like the

previous argument, it seems to show that it is wrong to think of objects in any way that requires the itemising account. By drawing the distinction between formal concepts and concepts proper Wittgenstein thought he would prevent us from thinking about concepts and objects as anything like Russell's or Frege's :

We can now talk about formal concepts, in the same sense that we speak of formal properties. I introduce this expression in order to exhibit the source of the confusion between formal concepts and concepts proper, which pervades the whole of traditional logic. (T.4.126)

Wittgenstein argues that the difference between concepts proper and formal concepts is indicated by the fact that concepts proper, but not the formal concepts, can be represented by means of a function. When something falls under a concept proper it can be expressed in a proposition, e.g. 'Socrates is a man'; we can say that Socrates is a value of a function 'x is a man'.

Neither Frege nor Russell made a distinction among concepts and they only discuss what Wittgenstein describes as 'concepts proper'. However, not all concepts can be represented in a formal notation by means of a function. Unlike 'concepts proper', 'formal concepts' cannot be represented by means of a function because, Wittgenstein says, their characteristics, i.e. formal properties cannot be expressed by means of a function; that an object falls under a formal concept can only be shown in the sign for this object. For instance, a name shows that it signifies an object, although this cannot be expressed in a proposition. 'A is an object' is ill-formed; it is not a proposition.

As the sign for a formal property of a concept is a common feature of the symbols whose meanings fall under this concept, Wittgenstein argues that the expression for a formal concept is a propositional variable in which

this feature is constant. The values of the propositional variable, i.e. the propositions that contain the expressions, signify the objects that fall under the concept. Thus, propositions fa , fb , fc , etc. all have the same propositional variable in common, i.e. ' fx '. This means that the variable name ' x ' is a sign for the formal concept 'object' and not for the thing itself. The word 'object' or 'thing', 'complex', 'fact', 'function', etc. signify formal concepts and can only be represented in a conceptual notation by variable names and not, as Frege and Russell thought, by functions or classes. Wittgenstein blamed the failure to observe the difference between proper concept-words and formal concepts for the nonsensical pseudo-propositions, e.g. 'There are objects', or, 'There are 100 objects'. It is nonsensical to ask whether a formal concept exists or not, for no proposition can be the answer to this question. This is why it is impossible to give the examples of objects. 'Logical forms are without number'. (T.4.128)

Wittgenstein put great stress on his interpretation of the logical status of objects. It seems he was aware of the difficulties surrounding its nature and logical status which could lead to a confusing interpretation of the role of analysis. He must have thought that these difficulties were sufficiently resolved by the distinction between formal concepts and concepts proper, for the argument is followed by statements confirming the function of analysis:

It is obvious that the analysis of propositions must bring us to elementary propositions which consist of names in immediate combination. (Wittgenstein, T.4.221)

He clearly thinks that the logical function of analysis has been sufficiently clarified by the preceding arguments. With reference to these arguments, the context principle expresses now a new idea:

It is only in the nexus of an elementary proposition that a name occurs in a proposition. (Wittgenstein, T.4.23)

With this new reinstatement of the contextual principle Wittgenstein concluded his argument that there must be objects and states of affairs 'even if the world is infinitely complex, so that every fact consists of infinitely many states of affairs and every state of affairs is composed of infinitely many objects' (T.4.2211)

Is Wittgenstein right in drawing this conclusion? I do not think that the difficulties surrounding the nature and logical status of objects in the Tractatus can be completely resolved. There are too many open questions to allow one interpretation of 'objecthood'. However, one thing seems to me certain, i.e. it is impossible to interpret Wittgenstein's objects as anything resembling Frege's or Russell's. This can be decisive in rejecting the usual interpretation of the views in the Tractatus from the perspective of Russellian atomism and trying to make sense of these views as reflecting the problems of language in which we try to make sense of our world.

V. WITTGENSTEIN'S VIEWS ABOUT MEANING IN THE PHILOSOPHICAL INVESTIGATIONS.

It is sometimes said that in his life, Wittgenstein offered two contrasting theories of meaning: one, which he presented in the Tractatus as the 'picture theory of meaning', and the other in the Philosophical Investigations in which he stressed the diversity of use that words have in language. These latter views are often summarized in a slogan 'the meaning of a word is its use in a language-game' and are thought of as the 'theory of meaning-as-use'. Although, it is true, without any doubt, that in his later life Wittgenstein held different views about language from the views he proposed in the Tractatus, I shall argue in this chapter that it is wrong to think of these views as the 'theory' of meaning-as-use. For, by the time Wittgenstein wrote the Philosophical Investigations, he abandoned the search for a theory which would explain 'the meaning' of language or, 'the meaning' of the world. Instead of a theory, or 'dogmas' about language, he proposed to look at what actually happens.

1. Meaning and Use: A New Conception of Language.

In the Philosophical Investigations Wittgenstein finally gave up the search for the hidden unity underlying the varieties of propositional forms. He came to believe that our ordinary language lacks a uniform feature by reference to which one could explain 'how propositions mean' and therefore, how language is possible. Instead of the formal unity which he earlier thought could be uncovered in language, he saw language as a complex phenomenon, rather like 'the family of structures more or less related to one another'. (P.I.,108), He thought that noting the 'use', or the role, which the linguistic

expressions play, was the most important feature in understanding their meaning. This is quite a different conception of language and meaning from the one which Wittgenstein held in the Tractatus. For whereas before he believed that language could be the object of a philosophical analysis and was a phenomenon complete in its own right, he thought later that the use to which words were put and the 'point of utterance' is what really matters to our understanding of language. He conceived of language as a social phenomenon which could be understood only against the background of other social activities. The slogan 'To imagine a language is to imagine a form of life' summarizes the conception of language in the Philosophical Investigations. (Wittgenstein, P.I.,19) Language is no longer regarded as 'idle', as it was in the Tractatus, but as a part of activity, a means of saying something. In the Investigations, the meaning of a word is no longer thought of as the enigmatic object represented by names in atomic propositions but as defined by its use:

For a large class of cases - though not for all - in which we employ the word 'meaning' it can be defined thus: the meaning of a word is its use in the language. (P.I.43)

Wittgenstein began the Investigations with an excerpt from St. Augustine's Confessions describing how the meaning of words is learnt by means of ostensive definitions. Although this extract does not accurately reflect St. Augustine's ideas about language, Wittgenstein meant it as representative of the most common view of what meaning is and how language is learnt. It is a simplistic idea of language and Wittgenstein wanted to demolish it once and for all, for he thought it responsible for a misleading conception of language and meaning. Although Wittgenstein does not deny that learning the names of particular objects constitutes an important part

of a complicated process of language acquisition, he stresses again and again in the Philosophical Investigations that 'having language' does not entirely consist in knowing how things are called:

One thinks that learning language consists in giving names to objects. Viz. to human beings, to shapes, to colours, to pains, to moods, to numbers, etc.. To repeat - naming is something like attaching a label to a thing. One can say that this is preparatory to the use of a word. (P.I.26)

Wittgenstein did not spare his own earlier views and devoted a great deal of Philosophical Investigations to the criticism of the Tractatus conception of language, in particular, the conception of names and objects. (P.I.26-46) In the Tractatus words were thought of as having meaning only in so far as they contributed to the sense of a proposition in which they occurred. Their significance was that in a fully analysed proposition, i.e. an atomic proposition consisting only of names, they were regarded as the representatives of the simple objects of reality. In the Philosophical Investigations Wittgenstein criticises this view as based not only on a wrong conception of names, but also on the misconceived idea of simplicity:

But what are the simple constituent parts of which reality is composed? - What are the constituent parts of a chair? - The bits of wood of which it is made? Or the molecules, or the atoms? - 'Simple' means: not composite. And here the point is: in what sense 'composite'? It makes no sense at all to speak absolutely of the 'simple parts of a chair'. (P.I.47)

Consequently, one has to abandon the view that meaning depends on the existence of the simple objects of reality, or, that objects give meaning to the simple signs which represent them in atomic propositions. Instead,

Wittgenstein proposed to look and see how words are actually used for the meaning of a sign is determined by the use it is put to. He realized that words have many functions as diverse as, for instance, those of tools in a tool-box (P.I.11), or handles in a locomotive cabin (P.I.12); there is nothing uniform about the use they can be put to. That names sometimes represent their bearers is only one of their numerous functions:

Nothing has so far been done when a thing has been named. It has not even got a name except in the language - game. This was what Frege meant too, when he said that a word had meaning only as part of a sentence. (P.I., 49)

Naming is only a preparation, not a move in a language-game. When a thing is named it is not yet given a role in a language-game; it is, Wittgenstein says, like putting a piece in its place on the chess-board in preparation for a game, but is not yet a move in the game.

2. Language-games.

Wittgenstein introduced the concept of game into his theory of language to illustrate the diversity of linguistic usages. The feature which makes the comparison between games and language particularly useful for the conception of language which he wanted to convey is that 'games' is a concept applicable to a great variety of activities which cannot be characterized by any common criteria. Games do not appear to have one single common feature in virtue of which they are regarded as games. The multiplicity of things that can be grouped under the name 'games' are related by a complicated network of similarities and relationships overlapping and criss-crossing which, Wittgenstein pointed out, can best be described as a family resemblance:

Consider for example the proceedings that we call 'games'. I mean board - games, card - games, ball

- games, Olympic games, and so on. What is common to them all? - Don't say: 'There must be something common, or they would not be called "games"' - but look and see whether there is anything common to all. For if you look at them you will not see something that is common to all, but similarities, relationships, and a whole series of them at that. To repeat: don't think, but look! (Wittgenstein, P.I.66)

'Games' form a family in which the various resemblances between the members cannot be specified in a rigorous way. Yet each game, whatever form it has, and however different it may be from other games, is a legitimate member of the 'family'. Similarly, 'language' can be regarded as a 'game-like' concept constituted by a family of varied activities.

The Tractatus theory of language was Wittgenstein's attempt to find the unity underlying the variety of the propositional forms; it represented his search for the general form of propositions which, he thought, would explain how language was possible and how propositions had meaning. By the time he wrote the Philosophical Investigations, he no longer believed that there could be one thing common to all that is called language - just as there was no one common feature between all that can be regarded as 'games'. Although Wittgenstein was still very much concerned with the problems of meaning, he no longer thought that it was possible to find the logical structure of language by reference to which meaning could be explained:

Instead of producing something common to all that we call language, I am saying that these phenomena have no one thing in common... (P.I.65)

The similarity which Wittgenstein saw between language and the concept 'game' meant that his search for the unity underlying propositional forms was over. Instead, he

proposed to show that the meaning of a word is determined by its use in particular situations, i.e. language-games. Language-games are models which he designed to illustrate how words, or expressions are, or, can be used.

In the Philosophical Investigations Wittgenstein uses the concept 'language-game' to refer to several patterns of what may be called linguistic behaviour. Although these patterns are related, they can be distinguished from one another by the degree of simplicity which the game requires. A paradigm of the most simple game is the famous 'builder's game' illustrating a very primitive system of communication. (P.I.2) The vocabulary of the builders' language consists of four words: 'block', 'pillar', 'slab' and 'beam', on hearing any of which one of the men has learnt to bring the requested item to the other. It is a simple 'game' of giving orders and obeying, there are, however, some others, progressively more complicated and requiring more skills than the builders' game. Among those which Wittgenstein has listed are: describing an object, reporting an event, making up a story, making a joke, telling it, translating from one language to another, asking, thanking, cursing, greeting and praying, etc..(P.I.23) Some language - games are simple, some can be quite complicated, but they are all characterized by a feature which is often overlooked, i.e. the completeness of each 'game'. It is this feature that allows one to make sense of the requirement that language - games must be regarded as the 'complete systems of human communication.' (Brown Book,5)

3. The 'completeness' of language-games.

At the beginning of the Philosophical Investigations, as well as in the Brown Book, Wittgenstein asked us to conceive of the builders's game as a complete primitive language. (P.I.7; B.B.77) This requirement often gives

rise to criticism that a language like the builders' can never be regarded as a whole language, i.e. 'a complete system of human communication'. Rush Rhees dismisses Wittgenstein's suggestion as quite impossible. (R.Rhees, 1970) For what kind of a language, he asks, can consist only of orders for moving building blocks? It is very implausible, Rhees argues, that the members of even the most primitive tribe never wished to expressed their desires, intentions, or any other human wishes or feelings. In Rhees's opinion, Wittgenstein's builders could not possibly be using what we normally call a language, for such a limited vocabulary is not adequate enough to be of any use for even the most 'primitive' community of men.

Suppose, Rhees argues, something goes wrong. For instance, one of the men asks for a beam but there is none to be delivered (they could have used them all). What will he do? He will be completely puzzled by departure from the routine which he has learnt to follow, unable to cope with a problem. To support his criticism Rhees uses Wittgenstein's own claim that to imagine a language is to imagine a form of life. He argues that if the language of the builders, or the language of a tribe, consisted only of a few calls and was really their whole language, the form of life of which such a language was an expression, would have to be quite unlike ours. It is inconceivable, he says, that there could be human beings whose form of life consisted only of giving few orders, obeying them - and nothing else! It is even impossible to imagine a community in which men never spoke or had any desire to express what they think or feel. Therefore, Rhees concludes, Wittgenstein's suggestion that the builders' language ought to be regarded as a complete language, is implausible. (R.Rhees, 1970)

Rhees's argument represents the most common objection stemming from mistakenly taking 'completeness'

of a language-game, a 'proto-phenomenon', for a holistic view of language. There is no doubt that Wittgenstein can be partially blamed for this mistake for, on several occasions, he asks one to imagine the builders' language as the whole language, 'even the whole language of a tribe'. (P.I.6,7; B.B.77) This may be responsible for the criticism which Rhees has made. In fact, the clue to the only possible interpretation which makes sense of Wittgenstein's suggestion is quite clearly stated at the beginning of the Investigations:

Do not be troubled by the fact that languages (2) and (8) consist only of orders. If you want to say that this shews them to be incomplete, ask yourself whether our language is complete; - whether it was so before the symbolism of chemistry and the notation of the infinitesimal calculus were incorporated in it; for these are, so to speak, suburbs of our language. (And how many houses or streets does it take before a town begins to be a town?). (P.I.18)

It is only when one thinks of the builders' language not as a 'proto-phenomenon', or, a language-game, but as the language, (English, for instance) that one loses the sight of the conception of language promoted in the Philosophical Investigations. The view of language which Rhees criticizes is not the same view of language which Wittgenstein offered in the Investigations. Builder's language is a complete model, a proto-phenomenon, the 'primary thing', but not the same thing which Rhees has in mind.

To argue that the builders' language cannot be regarded as a whole language, one would have to know what a 'whole language' is like, what 'form of life' signifies, or what 'speaking a language' means. Rhees seems to have such definite ideas. Although he admits that learning to speak is not to learn any single thing, he also implies

that what a child acquires when he learns a language 'is not something you can teach him by any sort of drill, as you might perhaps teach him the names of objects.' (R.Rhees, 1970, p.5) This clearly confirms one's suspicions that his ideas differ from the views that Wittgenstein wanted to convey.

In the Investigations, Wittgenstein held that in learning language, we learn, by example and practice, how words are used. (P.I.208) 'Having learnt language' has nothing to do with learning anything other than what can be taught by means of examples and practice. Thus, Wittgenstein's ideas stand in sharp contrast with Rhees' conception of language which does require 'reaching beyond' the examples and practice. This is why Rhees does not see the point of thinking about the builders' game, and therefore, any other language - game, as a 'complete' language. Language-games in the Philosophical Investigations were not meant to explain what language is but to throw light on the various ways in which language is used. This is what Wittgenstein means when, towards the end of the Investigations, he says that the question is not one of explaining a language-game by means of our experiences, but of noting that a particular language-game is actually played:

Our mistake is to look for an explanation where we ought to look at what happens as a 'proto - phenomenon'. That is, where we ought to have said: this language - game is played. (P.I. 654)

Language - games were not meant to promote any grand theory about what language or meaning is; to think of language-games as capturing the 'essence' of language means that one is still thinking in terms of the conception of language which Wittgenstein held prior to the Philosophical Investigations.

At the beginning of the Investigations, Wittgenstein remarks about the reasons for introducing language-



games:

It disperses the fog to study the phenomena of language in primitive kinds of applications in which one can command a clear view of the aim and functioning of the words. (P.I.5)

The study of language-games is to help one to see how the expressions of language are actually used; they are what may be called patterns of linguistic behaviour which illustrate the variety of linguistic usages. It is still a common mistake to think that Wittgenstein proposed in the Investigations a new theory of meaning, i.e. the theory of meaning-as-use and to contrast it with the picture theory of meaning which he proposed in the Tractatus. For instance, Kenny refers to Wittgenstein's views in the Philosophical Investigations as a theory of meaning. (A.Kenny, 1973, pp.159-160) However, the whole point of Wittgenstein's arguments in the Investigations was to show the futility of the search for a theory by reference to which one would explain how language is possible and what meaning is. The language-games do not, therefore, belong to any theory; their purpose is not to explain language but merely to describe it. Wittgenstein insisted in the Investigations that we must 'do away' with all explanation and description must take its place. (P.I.109) This is why language-games are better described as illustrations of the workings of language rather than explanations of how it works.

3.Elucidations: Language-Games and the Context Principle. In the Tractatus Wittgenstein introduced the concept of elucidations as a means of explaining the meaning of primitive signs.(T.3.263) By elucidations he meant the propositions which contained primitive signs, i.e. expressions which could not be analysed any further by means of definitions. Elucidations were the examples of how these signs were used in language.

It may seem that in the Philosophical Investigations language-games serve a similar purpose, though of course, the 'applications' are set in a different context, i.e. that of a social activity rather than a proposition.

In contrast to the earlier view, summarized in Frege's dictum which says that a name has meaning only in the nexus of a proposition, in the Philosophical Investigations Wittgenstein proposed to regard words and expressions as belonging to language-games and their meaning defined by the role they play in particular language-games. It seems as if the application of Frege's contextual principle, which Wittgenstein incorporated in the Tractatus theory of meaning, has been extended from propositions to language-games in the Investigations. For it looks as if the expression of the principle in: 'words have meaning only in the context of a proposition' differs from: 'words have no meaning outside language-games' only in the scope of its application. In fact, this change can be interpreted as reflecting the difference between Wittgenstein's views about language in the Tractatus and the Philosophical Investigations. In recent times, Davidson also appealed to Frege's principle and expanded it even further in order to apply it to language as a whole. (Davidson, 1967)

In his later life Wittgenstein came to believe that the Tractatus presented far too rigid a conception of language and that it gave an incomplete picture of an immensely complex phenomenon. Ironically, the Tractatus' view of language failed because it attempted an impossible task of giving a 'complete' account of language, i.e. of trying to find uniformity in language by reference to which its complexity could be explained. However, by the time he wrote the Investigations, Wittgenstein was convinced that there could not be anything hidden or underlying ordinary speech which a philosopher of language could uncover.

The Philosophical Investigations is about the search for an order but it is not the same order which Wittgenstein hoped for in the Tractatus. The language-games are not preparatory studies for a future regularization of language, or, as it is still sometimes thought, for a theory of meaning-as-use. Language-games should rather be thought of as objects of comparison, or, as models of linguistic practices which were to throw light on the workings of language:

The language - games are set up as objects of comparison which are meant to throw light on the facts of our language by way not only of similarities, but also dissimilarities.

(Wittgenstein, P.I.130)

Wittgenstein thought that looking at language in its 'idling' state and not doing its work, was responsible for the confusion which made him search for a general form of propositions in his early work. (P.I.132) Hence, it seemed to me that in the new conception of language, language-games took the place of the Tractatus elucidations as the context principle was expanded to incorporate what the elucidations had failed to take account of, i.e. that language is a complicated human activity in which we are immersed right from the moment we learn to say the first words. I realized, however, that although the idea that the meaning of a word is determined by its use can be thought of as an expanded form of Frege's context principle, it is misleading to compare the language-games to the elucidations in the Tractatus. For, as I shall argue, the elucidations serve a different purpose from the role that was ascribed to language-games in the Philosophical Investigations.

The concept of language-games brought to light a feature of language which was absent in Wittgenstein's previous account, i.e. the variety of things which we do by means of language. The list of those things, which

Wittgenstein compiled in the Philosophical Investigations, is by no means complete; neither do the numerous examples in the Blue Book exhaust all possible applications that words can have. For words and sentences have countless kinds of use which is neither permanently fixed, nor has clearly drawn boundaries. (P.I.23; 69) Therefore, it no longer makes sense to think that 'having meaning' can be explained by reference to objects which some words name, or, by reference to a general form of a proposition which underlies the variety of propositional forms. The meaning of an expression can be grasped by learning the 'use' it can be put to in a variety of situations. Learning the meaning is noting that this is how the word is used, or, not used. (P.I.,655) When a child learns how to speak he has to learn the whole complicated network of 'games' that can be played with various expressions; naming - as in the passage from St. Augustine's Confessions - is only one of the functions that some words have; it is one of many 'games' that is played in language. By learning how words are used, or not used, a child learns how language has meaning, i.e. how some combinations of words have sense and some others have not:

When a sentence is called senseless, it is not as it were its sense that is senseless. But a combination of words is being excluded from language, withdrawn from circulation. (P.I.500)

At the end of Tractatus Wittgenstein said that his propositions serve as elucidations only in such a way that anyone who understands him must recognize them as nonsensical 'when he has used them - as steps - to climb up beyond them'. (T.6.54) The aim of elucidations, he claimed, was to transcend these propositions 'to see the world aright' (T.6.54) It can be argued that finding how things 'really' are may have been the goal which Wittgenstein set to achieve in the Tractatus. If true, however, then the comparison between the elucidations in

the Tractatus and the language-games in the Philosophical Investigation must break down. The assimilation of language-games to elucidations in the Tractatus has turned out to be misleading. For although Wittgenstein said that language-games were set up as the objects of comparison which were meant to throw light on the facts of our language, his ideas in the Investigations of what can be achieved differs from what he searched for in the Tractatus. He saw that:

Philosophy simply puts everything before us, and neither explains nor deduces anything.- Since everything lies open to view there is nothing to explain. For what is hidden is of no interest to us. (P.I.126)

Language-games are not preparatory studies for any grand theory of language, nor are they meant 'to point beyond' in the way that was suggested at the end of the Tractatus. The necessity to transcend what language says, the idea of having to 'reach beyond' is not only absent in the Philosophical Investigations, but completely contradicts the conception of language which was put forward there. 'Look on the language-game as the primary thing'.(P.I.656); The point of a language-game does not lie beyond the game; it is to show how words are actually used - this is their meaning. We ought to look at what happens as a proto-phenomenon, Wittgenstein says. (P.I.654) It is a mistake to look for an explanation, or meaning, as if it was something else that goes on beyond a language - game, as some kind of extra-linguistic end which language -games are about.

Learning the meaning of language, as conceived in the Investigations, consists in nothing else but learning what the words and expressions can do; in noting what 'games' we can play with them and which combinations of words make sense and which do not. 'Having language' means that we know how to use it in a multitude of situations, that

we know what it makes sense to say and what it does not. We learn this in a complicated process, by means of examples and practice. And when we have learnt how 'to go on' using language by ourselves, we have not acquired anything that has not been taught; we have not 'climbed', in any sense, beyond the examples which were given to us, nor have we achieved a 'deep' understanding of the 'world aright' to which the propositional ladder of the Tractatus was meant to lead. (P.I.208-211) This is what, in spite of the initial appeal, makes the language-games unlike the elucidations in the Tractatus.

Although one way of looking at the language-games in the Investigations is to see them as an extended form of the context principle, Wittgenstein's conception of language and meaning underwent a radical change after he wrote the Tractatus. Language-games can be thought of as replacing propositions as the basic units of which talk about meaning makes sense, nevertheless, any suggestion that language-games resemble elucidations can only mislead one into thinking in terms of the conception of language prior to the Philosophical Investigations.

VI. TRUTH AND THE THEORY OF MEANING: DAVIDSON'S PROJECT.

In the previous chapters I have discussed different ways in which Frege, Russell and Wittgenstein attempted to illuminate the nature of meaning and the different things that each of them said concerning this problematic notion. Frege's idea that some of the problems regarding the meaning of linguistic expressions can be explained by differentiating between two aspects of meaning, i.e. sense and reference, carried a special promise for the theory of meaning. He thought that the distinction was particularly successful in dealing with the meaning of identity statements. It was thought that the distinction between sense and reference was also capable of explaining some of the linguistic and philosophical puzzles about language, e.g. the functioning of expressions in an 'opaque' context. However, the dichotomy of sense and reference resulted in some uncomfortable consequences for the theory of meaning when it was applied to some different aspects of language. By attributing sense as well as reference to proper names, and identifying the sense of an expression with the sense of some relevant description, the theory might have solved the problem of identity statements, but it also implied that names can have different meanings for different speakers.

Although Russell accepted Frege's proposal to equate the meaning of ordinary proper names with the meaning of corresponding definite descriptions, he found Frege's distinction too troublesome and confusing. He was convinced that we can do without the notion of sense in theorising about language and that the notion of reference

alone was sufficient to explain the meaning of expressions. His views, however, created a problem of how to account for the unity of a proposition, which continued to present problems for his theory. Russell's unsuccessful efforts to explain the logical form of sentences containing verbs of propositional attitudes also brought into prominence the difficulty with regarding all compound propositions as amenable to a truth-functional analysis of language.

Wittgenstein, on the other hand, believed that language is completely quantificational. He thought that it is quite possible to give the truth conditions for all meaningful sentences of the language following a recursive method of analysis, i.e. starting from the truth conditions of the simplest propositions and then showing how their truth affects the truth conditions of the compound propositions. In this respect, his theory can be said to have anticipated Davidson's research programme. J.J. Smart drew attention to this particular similarity in his paper entitled 'How to Turn the Tractatus Wittgenstein into (Almost) Donald Davidson'.(J.J.Smart, 1986)

Wittgenstein's understanding of the semantic problems in the Tractatus are judged by many philosophers as well ahead of his times. Nevertheless, in spite of his achievements, the picture theory of meaning hinges, as I have argued in chapter 3, on the confusing nature of objects as atoms of reality.

In his later life Wittgenstein's conception of language and meaning underwent a radical change. In the Philosophical Investigations he seems to have lost interest in the semantic issues which preoccupied him in the Tractatus. His interests shifted from the search for a general form of propositions by reference to which, he hoped, the meaning of a sentences could be explained, to problems concerning particular ways in which sentences

were used. He saw language as a social phenomenon and meaning determined by the ways that we actually use the expressions.

There can be no doubt that the theory of language which Wittgenstein presented in the Tractatus differs from the conception of language which he held in his later life. Nevertheless, it can be argued that Frege's ideas left a distinguished mark on many of Wittgenstein's arguments both in the Tractatus and the Investigations. Frege was first to point out that the meaning of a singular term can be understood only in so far as it contributes to the meaning of a proposition in which it occurs. I have argued that Wittgenstein not only endorsed Frege's principle in the Tractatus but also, that he made use of it in the Philosophical Investigations. It seemed to me that if there was some continuity in Wittgenstein's philosophy, the context principle could be thought of as the basis of this continuity. For the language-games in the Investigations can be regarded as Frege's principle set in a context of social activities, and the change in the scope of application of Frege's dictum, as reflecting Wittgenstein's new conception of language and meaning. Thus, the language-games can be thought of as a modified version of Frege's context principle, quite in accordance with Wittgenstein's later views. Frege's context principle appears again in Davidson's latest proposal where it is expanded even further and applied to language as a whole. In this theory, however, the expanded principle constitutes the basis of 'holism' which characterizes Davidson's conception of meaning.

Even a brief discussion of the main issues involved in their attempts to explain the concept of meaning must conclude that the numerous difficulties surrounding the notion are very serious. The concept of meaning, whether understood intensionally as Fregean 'sense', or extensionally as proposed by Russell, raises the problems

which none of the proposed theories can completely solve. Faced with these persisting difficulties, Davidson decided, almost in a Cartesian manner, to reject the confusing explanations and try to formulate the minimal requirements for a satisfactory theory of meaning. This novel approach to the study of meaning provided him with a plan for a research programme in semantics which has proved significant in breadth and scope. The programme was first sketched in the paper 'Theories of Meaning and Learnable Languages' (1964), which was followed two years later by 'Truth and Meaning', where Davidson has further advanced his ideas. These two essays, together with 'True to the Facts' (1969), 'Semantics for Natural Languages' (1970) and 'In Defence of Convention T' (1973) explore the idea that meaning could be explained if we only knew how to construct a theory which would, in some appropriate sense, 'give the meaning' of each sentence of the language, and would show how the meaning of a sentence was a function of its parts and structure. The only further restriction which Davidson thought necessary for an adequate theory of meaning for a particular language was that it had to be an empirical theory capable of objective verification. He believed that by reference to a theory which satisfied these minimal requirements, one would be able to explain what it is for words to mean what they do.

There is no doubt that the success of Davidson's theory depends to a great extent on whether his theory can successfully deal with the 'difficulties and conundrums' of a natural language. In the following chapters I shall present Davidson's proposal and assess its ability to deal with the specific issues, e.g. the problems created by indexical expressions, quotations and sentences in indirect speech. I shall argue in the concluding part that Davidson's proposal shows defects which prevents one from sharing with great confidence his enthusiasm for

the semantic taming of the natural languages.

All Davidson's essays to which I refer can be found in the collection Inquiries into Truth and Interpretation published by Clarendon Press, Oxford, in 1984.

1. Davidson's Proposal.

Many philosophers have made an attempt to explain the nature of language and the mechanisms of its acquisition. Davidson thought that the inadequacy of some of these proposals stemmed from insufficient consideration of the properties that language must have, if it is to be, even in principle, learnable. As it is an indisputable fact that natural languages, e.g. English or Swahili, are learnt, he thought it would be helpful to make clear when theorizing about language, what properties a learnable language must have. This requirement is a starting point for Davidson's argument in 'The Theories of Meaning and Learnable Languages' where he argues that although it seems impossible to explain the mechanisms of language acquisition, we are entitled to consider the properties a learnable language must have:

In contrast to shaky hunches about how we learn language, I propose what seems to me clearly to be a necessary feature of a learnable language: it must be possible to give a constructive account of the meaning of the sentences in the language. Such an account I call a theory of meaning for the language, and I suggest that a theory of meaning that conflicts with this condition, whether put forward by philosopher, linguist, or psychologist, cannot be a theory of a natural language; and if it ignores this condition, it fails to deal with something central to the concept of a language. (Davidson, 1965, p.3)

What Davidson regards as central to the concept of language which an adequate theory has to take account of, is the acquired skill, or ability of someone who can be

described as knowing a language, to produce, and understand sentences which he has never heard before. In other words, it is a requirement for a theoretical explanation of a practical skill which any competent speaker of language possesses. An adequate theory of meaning, Davidson claims, must be able to give account of this practical ability; it must be able to specify, solely on formal considerations, the meanings of an infinite number of sentences which the speaker of language can potentially understand and produce. In 'Theories of Meaning and Learnable Languages', he postulates that this task can be accomplished by a theory which in some, yet unspecified way, can explain how the meaning of a potentially infinite number of sentences depends on the meanings of a finite number of semantic primitives out of which all sentences are composed:

When we can regard the meaning of each sentence as a function of a finite number of features of the sentence, we have an insight not only into what there is to be learned; we also understand how an infinite aptitude can be encompassed by finite accomplishments. For suppose that a language lacks this feature; then no matter how many sentences a would-be speaker learns to produce and understand, there will remain others whose meanings are not given by the rules already mastered. It is natural to say such a language is unlearnable.

(Davidson, 1965, p.8)

Davidson is seeking a theory of meaning for natural languages, i.e. languages which are not only learnt, but also, which are learnt according to some specifiable rules. His main thesis depends, as he himself says, on a number of empirical assumptions. For instance:

...that we do not at some point acquire an ability to intuit the meanings of sentences on no rule at all; that each item of vocabulary, or new

grammatical rule, takes some finite time to be learned; that man is mortal. (Davidson, 1965, p.9)

A satisfactory theory of meaning must be able to account not only for the fact that natural languages are learnt according to some specifiable rules but also, it must explain the semantic productivity of a speaker, i.e. his ability to understand sentences which he has never heard before.

Any competent speaker of a language has the ability to produce and understand a potentially infinite number of sentences. Davidson believes that this phenomenon can be explained only if the meanings of the infinite number of sentences of the language are somehow recursively determined by the meanings of the finite number of 'semantical primitives', i.e. the individual items of vocabulary, or other structural features, out of which all sentences are made. Davidson is quite convinced that only a theory which is capable of accounting for the infinite competence of a speaker of a language acquired by finite means, can be regarded as an adequate theory of meaning for this language.

Davidson's 'learnability conditions', i.e. the requirement that 'it must be possible to give a constructive account of the meaning of the sentences in a learnable language', and that 'a learnable language has a finite number of semantical primitives', have been disputed by some philosophers as being too strong. In a paper 'Davidson on Learnable Languages', Robin Haack argues that it is an empirical fact that there are some languages, for instance, Peano's arithmetic, which are not finitely axiomatizable but which are, none the less, learnable. He argues that the existence of such languages contradicts Davidson's proposal that a learnable language must have a finite set of semantical primitives:

..it is an empirical fact that methods of truth utilizing (1) are learnable, and that such

methods

- (1) a sequence s of objects satisfies $F^n(t_k, \dots, t_n)$ iff the interpretation assigns s_k, \dots, s_n to F .
apply whether or not there is a denumerable set of predicates, and, assuming a distinct meaning to a distinct predicate, a denumerable set of meanings in the language, so that Davidson's contention that an infinite set of words meanings would impugn the learnability of language is mistaken. (Haack, 1986, p.236)

Robert Matthews agrees that Davidson's learnability conditions are too strong, but he argues in a paper entitled 'Learnability of the Semantic Theory' against Haack's criticism and points out that the fact that Peano's arithmetic, or Zermelo-Frankel's set theory are learnable, in spite of not being finitely axiomatizable, is irrelevant to the validity of Davidson's learnability conditions. (R.Matthews, 1986, p.49) He explains his point by arguing that the quoted theories are learnt 'under conditions of access to data' incomparable to those under which natural languages are learnt:

...learnability constraints of the sort that Davidson proposes are intended as necessary features of languages that are learnable under the given conditions of access to data; they are not intended to preclude the possibility that languages failing to satisfy these constraints might be learnable, or indeed learned, under different conditions of access to data. (R. Matthews, 1986, p.52)

I agree with Matthews that the underlying recursive mechanism of the sort that Davidson proposed in order to explain the learnability of the natural languages does not preclude the possibility that other languages which are not recursively definable can be learnt under different conditions. Peano's arithmetic, Zermelo-Frankel's set theory, and other possible systems which

are not finally axiomatizable, are learnable under different conditions from those under which the natural languages are learnt; they are explicitly taught and are acquired in a way different from the way in which one acquires a natural language. Therefore, their existence need not contradict the learnability conditions which Davidson imposed upon the theory of meaning for a natural language.

On the other hand, I also agree that although it may be difficult to explain how language learning is possible without some underlying recursive mechanism which, to paraphrase Wittgenstein's expression, enables one 'to go on ad infinitum', what follows from Davidson's learnability restrictions on the semantics of a natural language may throw doubt on his holistic requirement, i.e. that we can give the meaning of any sentence (or word) only by giving the meaning of every sentence (or word) in the language. (Davidson, 1967,p.5)

The learnability claim seems to imply that what one acquires in the process of language learning is some finite piece of knowledge, the acquisition of which is necessary and sufficient for the speaker of the language to understand and produce the infinite number of sentences. This claim can, no doubt, explain the semantic productivity of a competent speaker of a language, for if we had a theory which could account, in a recursive manner, for the meaning of all sentences of a language to which it applied, this theory would satisfy the learnability conditions which Davidson imposed upon the natural languages. It seems that there must be such a base, a finite piece of knowledge, if only to explain how learning the meaning of the infinite number of new words and sentences is possible. For our understanding of the new sentences can only be explained by reference to the meanings of words and sentences already known.

However, the claim that the speakers of a language actually learn some final piece of knowledge, in virtue of which they are able to understand their language, implies that it must be possible to learn the meaning of at least some words and sentences independently of the rest of a language. Thus, if we suppose that the knowledge of a potentially infinite number of sentences can begin with learning the meaning of only part of a language, we cannot claim that we have got a full and complete understanding of the meaning of all words and sentences of the language, and believe at the same time, that the meaning of any sentence, or word, can be given only by giving the meaning of every word or sentence in the language. For even if we ignore empirical difficulties with defining what constitutes the 'independently learnable base', we must still allow the possibility that some future encounters with a novel piece of language may alter our understanding of this base.

In spite of this difficulty, I do not think that Davidson could possibly give up the holistic condition which he imposed on an adequate theory of meaning. For suppose he has got such a non-holistic theory, i.e. a theory which applies only to part of a language, e.g. all indicative sentences. This theory would be able to account for the contribution of the meaning of all words to the meaning of all indicative sentences in which they occur. But it is not unreasonable to suppose that some of these words can also appear as the constituents of other sentences, e.g. imperative sentences. The theory, however, would not be able to account for the contribution of these words to the meaning of imperative sentences, for its explanatory power does not extend beyond the indicative sentences for which it was created. Therefore, the non-holistic theory cannot be regarded as an adequate theory of meaning for the whole language.

Among the numerous difficulties which the traditional

theories of meaning tried to explain, the problem of how to account for the unity of a proposition was probably one of the most notorious. Both Frege and Russell recognized that the ability to explain how the meaning of simple expressions contributes to the meaning of the complexes in which they occur was fundamental to their theories of meaning. Davidson is far from denying that the main task of a satisfactory theory of meaning is to give such an account. On the contrary, the restrictions which he has imposed upon a learnable language demand that a theory of meaning must show how the meanings of the complex expressions are generated from the meanings of the simple ones.

Davidson, however, has learnt a lesson from the failure of his predecessors' attempts to deal adequately with questions concerning meaning. He realized that the attempts to explain meaning in terms of entities represented by the expressions of language are doomed to fail. The notion of meaning, whether applied to the individual parts of complex expressions, or whether applied to complete sentences, generates insoluble problems. Frege's highly promising distinction between the sense and reference of singular expressions has turned out to be of no use to the theory of meaning, while his idea of regarding names and sentences as singular terms not only blurred the boundary between simple and complex expressions but, also, it lead to the intolerable result of all sentences alike in truth value being synonymous with one another. On the other hand, Russell's attempt to explain meaning in terms of purely extensional entities also failed when it was applied to some of the problematic issues.

'Postulating meanings' Davidson said, 'has netted nothing'. Thus, while he still found it necessary to follow the principle which affirms that the semantic properties of a complex expression are the function of

the semantic properties of its constituents, Davidson thought of a way to avoid the need to refer to the meaning of the troublesome 'parts' of a sentence and the entities to which they were supposed to refer. He thought, it was possible to construct a theory of meaning which did not require any specifications as regards how language was to be fragmented, or what the meaning of the individual words were, in any other but the 'ontologically neutral sense of making a systematic contribution to the meaning of the sentences in which they occur.' Consequently, the only legitimate task for a theory of meaning which Davidson was prepared to accept, was the task of uncovering the logical grammar, or the form of sentences. He proposed to treat individual words and expressions as primitive and this allowed him 'to leave the whole matter of what individual words mean exactly where it was'. (Davidson, 1967, p.33) Thus, he could also suggest that we can eliminate the troublesome talk about meaning in the theory of meaning altogether.

In 'Theories of Meaning and Learnable Languages', Davidson already mentioned that we must look for a theory which is capable of accounting for the meaning of all sentences of the language to which it applies. He returned to this insight again in 'Truth and Meaning' and proposed that a satisfactory theory of meaning should have as consequences all sentences of the form: 's means m', where 's' stands for a structure-revealing description of a sentence and 'm' represents a singular term which refers to the meaning of that sentence. He argued that if we had such a theory, we would be in possession of an effective method for determining, for any arbitrary sentence of the language, what this sentence means.

Davidson pointed out that none of the traditional theories of meaning could fulfil this simple requirement

without initiating a long chain of problems and irrefutable objections. The difficulties encountered by these theories, he argued, were all caused by the need to refer to the individual parts of a sentence, and their meanings, as the constituent parts of the logical form of a proposition in which they occurred. He was right, for as we have seen in the previous chapters, these problems were responsible for the difficulties inherent in both Russell's and Wittgenstein's theories. In most of his major works Russell was haunted by the problem of the unity of a proposition which he first acknowledged in the Principles of Mathematics. It is also possible to argue, as I have shown in chapter 3, that a certain interpretation of the contextual principle could undermine Wittgenstein's picture theory of propositions.

The originality of Davidson's proposal comes from the lesson he has learnt from the difficulties encountered by his predecessors. He argues in 'Truth and Meaning' that if the source of the problems for the theories of meaning can be traced to the obviously impossible task of accounting for the contribution of the meanings of the individual items of the vocabulary to the meaning of the sentences in which they occur as the constituent parts, then obviously, the notion of the meaning of a sentence which requires the itemizing account is useless. The uncovered difficulties only confirm that there is something holistic about the meaning of a complex expression which the itemizing account irreversibly destroys. But Davidson envisaged the idea of holism even in a broader aspect than the holism inherent in the concept of meaning of a sentence spelled out by Frege's contextual principle. He proposed that the right way to exhibit the correct holistic nature of meaning is to extend the principle to the whole language :

If sentences depend for their meaning on their structure, and we understand the meaning of each item

in the structure only as an abstraction from the totality of sentences in which it features, than we can give the meaning of any sentence (or word) only by giving the meaning of every sentence (and word) in the language. Frege said that only in the context of a sentence does a word have meaning; in the same vein he might have added that only in the context of the language does a sentence (and therefore a word) have meaning. (Davidson, 1967, p.22)

Davidson's endorsement of the contextual principle in its extended form has some important consequences for his project. It shows that the meaning of a sentence - in the sense in which 'm' in 's means m' is supposed to be replaceable by a singular term referring to the meaning of a sentence, contributes nothing useful to the theory of meaning, except that it urges us to dispense with meanings altogether. It shows, Davidson argues, that the appeal to the meanings of sentences, just as much as the appeal to the meanings of words, 'nets nothing' and therefore, the claim that the theory should yield all sentences of the form 's means m' where 'm' implies a singular term referring to the meaning of a sentence, is as misleading as the theory which requires the itemizing account.

Bearing in mind the cause of the difficulties, Davidson suggests that the best course would be to avoid talking about the meanings of sentences altogether by stipulating that 'm' in the schema should not be replaced by a singular term but only by a sentence which has the meaning described by 's'. But the requirement for the theory of meaning that it should entail all sentences of the form 's means that p', instead of the original requirement for sentences of the form 's means m', saves the theory from Scylla only to let it fall into Charybdis, for the intensional expression 'means that', as

Davidson knows, is as much problematic as the old term referring to meanings as entities. This is the reason why it seems to him that the only possible way out of the dilemma is to seek another, completely new route to arrive at the desired destination, i.e. the specification of the conditions which a theory of meaning for a language L should satisfy.

Davidson proposes 'a simple and radical' solution, i.e. he proposes to dispense altogether with the troublesome intensionalist 'means that' paradigm of analysis. He does not, however, want to surrender his hope that an adequate theory of meaning should provide 'for every sentence s in the language under study, a matching sentence (to replace p) that, in some way, yet to be made clear, 'gives the meaning' of s.' But in the view of the previous difficulties with the intensional 'means that', he proposes now to treat the position occupied by p extensionally. And so, in a final 'bold step', Davidson formalizes this requirement by providing the sentence that replaces p with a proper sentential connective and the description which replaces s with its own predicate. As a result of this transformation he can now state as the final requirement for the theory of meaning for a language L that it should entail all sentences of the form:

s is T if and only if p

in which 's' is a structure revealing description of a sentence 'p' of the language for which the theory is being given, and the predicate 'is T' stands for any arbitrary predicate which can satisfy this condition. But, of course, any predicate which satisfies this condition is recognizable as Tarski's materially adequate truth - predicate, and the schema which Davidson has reached in his search for the conditions which an adequate theory of meaning for a language should satisfy, is, in fact, Tarski's Convention T. Thus, the conclusion which Davidson draws from this discovery is that he does not

need to search for any better theory than the one which Tarski has already proposed. In his eyes, a theory of truth along the lines of Tarski's Convention T contains 'the sophisticated and powerful foundation of a competent theory of meaning'. (Davidson, 1967, p.24) The task of a theory of meaning turned out, according to his account, to be a task defined by Tarski's condition of material adequacy of an acceptable theory of truth:

To know the semantic concept of truth for a language is to know what it is for a sentence - any sentence - to be true, and this amounts, in one good sense we can give to the phrase, to understanding the language (Davidson, 1967, p.24)

Davidson has come to a conclusion that a theory which can provide a truth definition for every sentence of a language suffices as a theory of meaning. For if we know, he says, what a true sentence is, there is nothing else needed to know what this sentence means. He argues that we can dispense with the 'meanings' in the theory of meaning for, as it turned out, Tarski's Convention T offers a paradigm for a theory of meaning which makes no use of the 'meanings', either of sentences or words.

The appeal of a truth-condition theory of meaning may, perhaps, explain a great deal of the attention which Davidson's proposal has attracted in recent years. For a theory which promises to shed light on meaning and avoid the troublesome issues raised by the previous attempts to explain the notion of meaning does indeed deserve to be taken seriously. The great advantage of Davidson's truth-condition theory is that, according to Quine's classification of the semantic notions, it can be classified as the less troublesome 'theory of reference' rather than the 'intensional' theory of meaning. It means that it promises to explain the intensional notion of meaning in terms of the extensional concept of truth.

However, while there is no doubt that there is some

connection between truth and meaning, for the truth of a sentence depends on its meaning, it does not seem to me entirely clear whether this by itself is a sufficient reason to propose that a theory of meaning for a language should take the guise of a formal theory of truth for that language. The question is : Why a theory of truth should shed light on meaning? There is, of course, evidence that theories of truth for artificial languages do illuminate meaning. For instance, the truth - functional analysis of sentential connectives might be thought of as explaining the meaning of these connectives. However, Davidson's theory was intended to apply to all natural languages. Therefore, it may not be clear why the truth conditions of any sentence should be relevant to their meaning in the sense that Davidson requires. Why the understanding of the predicate '...is true' should be thought to explain what 'means' means? Davidson's argument in 'Truth and Meaning' gives no explanation of this supposed equivalence; it merely appeals to the analogy between what is expected from the theory of meaning and Tarski's condition of material adequacy which a theory of truth should satisfy. It is true that Davidson claims that the task of a theory of meaning is not to explain the meaning of the individual expressions but to analyse the logical structure of sentences. He described himself as seeking the logical form of expressions. I agree that consideration of the truth conditions of a sentence can explain something about its meaning, e.g. it can tell us something about the logical form of a sentence. I cannot agree, however, that Davidson's theory tells us everything we might want to know about the meaning of a sentence. A theory of meaning can shed light on the meaning of logical terms and other aspects of logical structure but, it does not shed light on the meaning of other terms. It, therefore, seems that a Tarski-style formal theory of truth should not be

identified with the theory of meaning.

Tarski's theory of truth is obviously central in Davidson's account of meaning. However, the crucial difference between Tarski's formal theory of truth and Davidson's theory of meaning is that Davidson is seeking a theory of meaning for natural languages while Tarski was explicitly skeptical about the prospects of applying a theory of truth to a colloquial language, e.g. English. In fact, Tarski consistently denied that a theory of truth could be constructed for the natural languages. The success of Davidson's proposal must therefore depend on his ability to show that Tarski's theory of truth can be extended.

Tarski argued that natural languages are semantically 'closed' because they contain their own meta-language, i.e. in addition to their own expressions, they also contain the means of referring to those expressions and the semantic terms, e.g. 'true' and 'false'. It is also impossible to specify their structure as, e.g. we can specify the structure of the formalized languages of the various systems of deductive logic and mathematics. (A.Tarski, 1931) Tarski argued that because the natural languages are semantically closed and are not formally specifiable, they allow the occurrence of antinomies. However, he did not think it was possible to overcome this serious difficulty without interfering with the natural structure of language. He therefore thought that the prospect of a definition, and a theory of truth for a colloquial language, was rather gloomy; his Convention T could only be a schema of the true sentences implied by an adequate definition of truth.

Tarski was not the only one to realize the seriousness of the difficulties which the paradoxes posed for theories of truth and language. After their discovery in Frege's system, the paradoxes became of serious

philosophical concern. Russell, whose discovery of the inconsistency made Frege remark that 'hardly anything more unfortunate could befall him', himself suggested a solution in the form of a theory of types. Since then there have been many attempts to solve the problems raised by the occurrence of paradoxes in a natural language. It became apparent that unless a satisfactory explanation was found, a consistent theory of truth for a language in which the paradoxes occur would be impossible. Hence, it comes as a surprise that Davidson chose to ignore the problem and to carry on, 'without having disinfected this particular source of conceptual anxiety'. (Davidson, 1967.p.28)

Davidson's inability to tackle the problem of paradoxes in natural languages seems to me a serious flaw in his project. Especially since this was the reason why Tarski remained sceptical about the possibility of a truth theory for a natural language and had to restrict his definition of truth to formalized languages only. The failure to account for the contradictions in a language for which Davidson seeks an adequate theory of meaning throws doubt on the competence of his proposal. For he said nothing that could disperse Tarski's objections which had prevented him from applying a theory of truth to all natural languages.

Davidson postulated that an adequate theory of meaning should be able to account for all sentences of a language and expressed this holistic requirement in the following words:

We can give the meaning of any sentence (or word) only by giving the meaning of every sentence (and word) in the language. (Davidson, 1967,p.5)

'Carrying on' without offering any means of explaining how his proposal can deal with the recognized inconsistencies of language, leaves behind a large gap of unaccountable sentences. It undermines the principle of

holism which Davidson described as the necessary and sufficient condition of the adequacy of a theory of meaning. Nevertheless, Davidson seems satisfied with applying his theory only to those fragments of language for which the question of paradoxes does not arise.

Davidson must have been aware of this particular weakness of his theory for he attempts to justify the sudden change in its scope by pointing out that 'most of the problems of general philosophical interest arise within a fragment of the relevant natural language that may be conceived as containing little set theory'. (Davidson, 1967, p.29) This explanation, however, cannot be regarded as satisfactory, for Davidson made it clear on many previous occasions that an adequate theory of meaning must apply to the whole language.

Davidson has found in Tarski's theory the inspiration for his theory of meaning. Nevertheless, his beliefs about the logical nature of language differ from Tarski's ideas which may account for the obvious difficulties he has with squaring Tarski's attitude to paradoxes with his own plans for a theory of meaning. Tarski thought that colloquial languages do not possess a specifiable structure or vocabulary, and that we would have to reform everyday language out of all recognition before we could apply to it formal semantical methods. This was the reason why he sacrificed the universality of his theory and restricted it by the condition of formal adequacy to artificial languages with an exactly specifiable structure and vocabulary.

In contrast to Tarski's pessimistic conception of language, Davidson believes that it is possible to reveal the logical structure of, at least, some parts of a natural language in order to understand its workings. In this respect his project resembles what Russell and Wittgenstein saw as the main task of their investigations into the nature of language during the

logical atomist period. But, whereas Russell was pessimistic about the usefulness of the natural languages for the task which he had set before him and sought after an 'ideal language', Wittgenstein thought that all the propositions of our everyday language 'just as they stand, are in perfect logical order'. (Wittgenstein, T.5.5563) It can be said that Davidson carries on the Wittgensteinian tradition for, like his predecessor, he also believes that the logic of language can be understood and explained without the need to improve or reform it :

... the task of a theory of meaning as I conceive it is not to change, improve or reform a language, but to describe and understand it . Let us look at the positive side. Tarski has shown the way to giving a theory for interpreted formal languages of various kinds; pick one as much like English as possible. Since this new language has been explained in English and contains much English we not only may, but I think must, view it as part of English for those who understand it. For this fragment of English we have, ex hypothesis, a theory of the required sort. (Davidson, 1967, p.29)

While Tarski perceived a colloquial language as a 'jungle of vagueness and ambiguity' Davidson postulates the existence of hidden logical forms of expressions which can be understood and explained. It is where, he believes, the work of philosophers of language and linguists like Chomsky, will eventually converge and show that what both the grammarian and the philosopher of language seek after is one and the same goal, i.e. the foundation of semantics.

'If we regard', Davidson says in 'Semantics For the Natural Languages', 'the structure revealed by a theory of truth as deep grammar, than grammar and logic must go hand in hand.' (Davidson, 1970, p.61) As far as I know, no work in transformational grammar has so far suggested a way of

overcoming the difficulties which prevented Tarski from applying his theory of truth to natural languages. Therefore, I believe that this particular source of 'conceptual anxiety' continues to generate difficulties for a theory which is to apply to semantically closed languages.

Davidson thinks that the main task of a theory of meaning is to reveal the logical grammar or form of the sentences of the language to which the theory applies. (Davidson, 1967, p.31) As I have already argued, his project differs from the previous attempts in that it promises to explain how the meaning of complex expressions depends on the meaning of their parts, not by an appeal to the troublesome 'meanings' of individual expressions but by means of the analysis of their logical structure; His theory implies that meaning belongs to the logical form of language.

Davidson proposed that a theory of meaning does not need to give the meaning of the individual words but it ought to show how these words contribute to the meaning of sentences in which they appear. The theory should exhibit the logical form of e.g. 'Smith is a good writer' and explain why it is not equivalent to, e.g. 'Smith is good and Smith is a writer', whereas 'Smith is an English writer' is equivalent to 'Smith is English and Smith is a writer'. Davidson claims that Tarski's Convention T offers a perfectly adequate test of a logical form of any sentence for we know that the logical form of 'Smith is a good writer' is not equivalent to 'Smith is good and Smith is a writer' because we know that this sentence is not true if and only if Smith is a good writer. On the other hand, we know that the logical form of 'Smith is an English writer' is equivalent to 'Smith is English and Smith is a writer' because we know that this is true if and only if Smith is an English writer. And this, he believes, also suffices to show that truth is

relevant to meaning.

Davidson is convinced that he found in Tarski's method of defining the truth predicate a completely perspicuous way of testing the logical form of sentences, a way which dispenses with the need to mention the troublesome 'meanings'. He thinks that Tarski's method enables one simply 'to leave the whole matter of what individual words mean exactly where it was'. A great advantage of the theory inspired by Convention T, he says, is that 'even when the metalanguage is different from the object language, the theory exerts no pressure for improvement, clarification, or analysis of individual words'. (Davidson, 1967, p.33) It simply provides empirically tested means of correlating sentences alike in truth value while avoiding most of the difficulties which vagueness, ambiguity and indexicality occurring in natural languages generated for the previous theories of meaning.

It is not a modest claim although Davidson admits that 'a staggering list of difficulties and conundrums remains' (Davidson, 1967, p.35) The list, at the time of 'Truth and Meaning', included the unknown logical forms of counterfactuals, subjunctives, probability and causal statements, the logical role of adverbs, attributive adjectives, mass terms, verbs of propositional attitudes and many other with which a comprehensive theory of meaning for a natural language must cope successfully. Since then, Davidson has tackled many of the problems which troubled his predecessors. He has proposed a solution to some of these problems in papers collected in his Inquiries into Truth and Interpretation under the common title 'Applications' although the solution to some other problems, e.g., indexicality, were already indicated in his earlier papers.

The fact that language contains indexicals, i.e. expressions whose reference depends on the time, place or speaker, e.g. 'here', 'now', 'I', 'this', 'that', etc.,

has always generated difficulties for the theorists of language. The problem has been described by Davidson as stemming from the fact that a sentence containing an indexical expression 'may be true at one time, or in one mouth, and at another time or in another mouth be false.' (Davidson, 1967, p.33) It seems as if the laws of truth-functional logic or formal semantics could not be applied to sentences containing indexicals. Consequently, the choice has been either to ignore a large portion of language in which the indexicals occur, or to conclude that it is impossible to give a coherent semantics for a natural language.

In my discussion of Frege's notion of thought, I have already mentioned that he was aware of the implications stemming from the feature of language which Reichenbach called 'token-reflexiveness'. Frege, however, made no attempt to work out any adequate theory for the sentences containing token-reflexive expressions. But we can gather from the brief remarks in 'The Thought', in which he discussed this problem, that he considered as unimportant the feature of language which requires for the expression of a thought to be supplemented by considerations of the conditions of utterance of a sentence:

Yet the same words, on account of the variability of language with time, take on another sense, express another thought; this change, however, concerns only the linguistic aspect of the matter. (Frege, 1918, p.37)

Earlier in the same paper, Frege pointed out that a sentence containing an indexical expression, does not, by itself, express a thought. He believed that 'the knowledge of certain accompanying conditions of utterance, which are used as means of expressing the thought, are needed for its correct apprehension'. (Frege, 1918, p.24) But in the rest of his writings Frege did not mention the feature of language which would require relativized

notions of truth and falsity. For Frege, a thought had to be either absolutely true or false and his principal discussions of the problems of language must be understood as relevant only to those sentences whose sense can be determined independently of the context in which it was uttered.

Davidson is not prepared to dismiss the problems caused by the indexical expressions as unimportant; nor does he think that the non-linguistic context which determines the truth value of utterances in which a token-reflexive expression is used is a sufficient reason for supposing that no coherent semantics can be given for a language which contains sentences with the indexical elements. On the contrary, he believes that the function of the sentences containing indexicals is too important to be ignored by a competent theory of meaning. It is obvious, he says, that we cannot get along without indexicals, we must therefore have a theory which accommodates them. An adequate theory of meaning must be able to relate the truth conditions of sentences with token-reflexive expressions to changing circumstances. This can be achieved, Davidson says, if we view truth as a relation between a sentence, a person, and a time. Only when Tarski's theory is relativized in that way to changing circumstances, the (T) schema will also entail sentences containing indexical expressions. A theory of truth for the language containing indexicals must view truth as a predicate of the utterances determined by the speakers and times:

'I am tired' (spoken by p at t) is true if and only if p is tired at t.

Or:

'That chair was broken' (spoken by p at t) is true if and only if the chair indicated by p at t was broken prior to t.

Davidson claims that his method can explain not only how

indexical expressions adjust their reference to the context in which the sentence is uttered, but that it can also prove useful in explaining the problems concerning quotation and sentences with verbs of 'propositional attitudes'. He believes that quotations, as well as sentences with verbs of propositional attitudes, involve concealed demonstratives amenable to formal treatment by his method.

Davidson was very hopeful about the prospects of a serious semantics for a natural language. There is no doubt that the assessment of his programme must take into account whether his analysis of indexicality, quotations, oratio obliqua, and other outstanding puzzles, has been more successful than the efforts of other theorists of language which were discussed in the previous chapters. It may even seem that Davidson has achieved a considerable success in explaining some of the semantic 'conundrums' which I shall discuss in the following chapter. But in assessing Davidson's programme one must not lose sight of the fact that the real issue at stake is whether he has succeeded in showing that Tarski's skepticism as regards the possibility of a competent theory of truth for a natural language was unjustified; that he has dispersed the problems which made Tarski postulate that truth can only be defined for the formalized languages. I am inclined to think that Davidson has not achieved that goal and that the unsolved problem of paradoxes continues to cast doubt on his claim of success.

VII. REPORTED SPEECH: THEORIES OF QUOTATION AND ORATIO OBLIQUA.

1. Theories of Quotation.

Reported speech belongs to the area of language which attracted some special attention from the philosophers who considered understanding of the functioning of language as central to their studies. It occupies an important part in those studies as reflecting in a particularly vivid way the problematic issues of the theories of language and meaning that have been put forward in this century. Some of these problems have already been mentioned in the previous chapters, e.g. Frege's analysis of quotation marks expressions and indirect speech, and Russell's analysis of sentences containing verbs of 'propositional attitudes'.

Traditionally, reported speech has been held to take either the direct or the indirect form; direct speech being indicated by quotation marks, indirect - by the verbs 'says', 'believes', 'thinks', etc. followed by a that-clause. Frege thought that a word standing between quotation marks must not be taken as having its ordinary meaning, but his main concern was with indirect discourse. He thought that a sentence in indirect speech has as a reference what is normally its sense. (Frege, 1892b,37) I have already mentioned that Russell objected to Frege's proposal but he himself had great difficulties in explaining the logical form of sentences containing verbs of propositional attitudes, on 'purely extensional' grounds. His problem was how to explain the logical form of compound sentences whose truth-values did not seem to depend in any obvious way upon the truth-values of their parts, without offending, as he said, his 'instinct for reality'. Russell was never able to find any acceptable solution to the problems raised by

his analysis of 'propositional verbs'. Consequently, he felt compelled to provide a place in his inventory of the world for a special class of facts which contained true and false beliefs. (Russell, 1918, pp.227-228)

In the Tractatus, Wittgenstein dismissed Russell's analysis of propositions with two verbs, e.g. 'Othello believed that Desdemona loves Cassio'. He classified 'belief sentences', together with statements about people's knowledge and perceptions, as pseudo-propositions, or, as conjunctions of a genuine proposition with a spurious one. This allowed him to dispose of a misleading illusion which perplexed Russell, i.e. that propositions like 'A believes that p', 'A has the thought p', and 'A says p' are about some kind of relation between an object A and a proposition p. Believing that p, having the thought p, saying p is just a way of articulating p, Wittgenstein said in the Tractatus.

Wittgenstein was not specially concerned with the peculiarities of the quotation-mark expressions which Davidson described as a device which 'makes language turn on itself, word by word, expression by expression, in a reflexive twist'. However, some philosophers became progressively aware of the special problems which the peculiarity of this linguistic device creates for a theory of truth. For, as Frege pointed out, quotation is a device which seems to create a context within which words, and the whole sentences, play different referential roles.

Tarski believed any attempt to articulate a consistent theory of quotation marks leads to absurdity, ambiguities, and contradictions. He came to the conclusion that the only defensible interpretation of quotation was to treat the whole quotation marks expression, i.e. a set of left and right quotation marks plus the expression between them, as a syntactically simple expression, as a single word of a language. He thought that every

quotation-mark name must be regarded as a constant individual name of a definite expression; that is, as a name of the same nature as a proper name of a man. (A.Tarski, 1931, pp.159-162)

Our grammatical conventions require, Tarski argued, that in any meaningful utterance which we make about an object, a name of this object and not the object itself must be employed as the grammatical subject. As the subject of a sentence can only be constituted by a noun, or an expression functioning as a noun, the expression 'Snow is white' in "'Snow is white' is true" must be regarded as a name of the sentence 'Snow is white' and not the sentence itself. This is indicated by 'Snow is white' being enclosed in quotation marks. Tarski pointed out that although this is not the only way to form a name, e.g. we can name an object by giving a complete structural description of it, nevertheless, quotation marks are conventionally used as a means of showing that the expression contained between the quotation marks is a grammatical subject of the sentence.

The fact that Tarski restricted the totality of the possible substitutions for 'x' in: 'x is a true sentence' to quotation-mark names made it impossible to turn the Convention T into a general definition of truth. It might be thought, for instance, that since we can think of each instance of (T) schema as a partial definition of truth, in that each instance of the schema specifies the truth-conditions of one specific sentence, we could turn the Convention (T) into a definition of truth by means of the universal quantifier. If each instance of the (T) schema represents one sentence of a language, one might think that we could obtain a general definition of truth:

(p) ('p' is true, iff p)

where p stands for any sentence of the language and 'p' is a name of this sentence.

Tarski rejected this suggestion, for he believed that

it was quite meaningless to think of quotation-mark names as functions. It would require to treat the quotation-mark names as syntactically composite expressions, with the quotation-marks and the expression within them as their parts. This interpretation, Tarski argued, would only lead to enormous difficulties as regards the nature of those parts and therefore, it must be rejected. Instead, he preferred to sacrifice the universality of his theory and to regard quotation, consisting of an expression flanked by quotation marks, as logically simple.

Tarski thought that the account of the quotation-mark names which he proposed, was the most 'natural' and completely in accordance with the customary way of using quotation marks. (A.Tarski, 1931, p.160) But the theory that quotation-mark names are to be treated as singular terms with no significant structure is neither simple, nor quite consistent with how quotation works in a natural language, as Tarski thought.

If we treat quotation as a structureless singular term, we may have difficulties with explaining the relation between an expression and the quotation-mark name of that expression. For if a quotation-mark name is a syntactically simple unit, analogous to a proper name, then, that snow is white, cannot be regarded as part of 'snow is white'. This makes the relation between the expression obtained by placing quotation marks around an expression and this expression much more mysterious than is implied by an informal rule that governs its use, i.e. we may form a quotation-mark name of an expression by enclosing that expression with the set of quotation marks.

Davidson's main objection to the theory which treats quotations as structureless singular terms is, that it cannot account for the truth conditions of sentences containing quotation-mark names. This is particularly

important for his theory of meaning because its credibility depends on whether Tarski's theory of truth can be extended to all sentences of natural language. In an adequate theory, Davidson says, every sentence is construed as owing its truth-value to how it is built from a finite stock of parts 'by repeated application of a finite number of modes of combination'. (Davidson, 1979, p.83) This condition cannot be satisfied if we accept a proper-name interpretation of quotation.

The idea of structured quotations seems to offer much better prospects for a theory of language containing quotations. It also seems that a theory which treats the quotation, not as a singular name, but as a syntactically composite expression made up of the expression and the quotation marks, is more in accordance with our practical knowledge of how quotation works in language. It also allows us to consider the possibility that quotation marks indicate a special linguistic context in which an expression pictures itself, as if the quotation marks were the frame and the quoted material the picture in which the expression refers to itself. Davidson has attributed this idea to the German logician Hans Reichenbach whom he quotes as saying that quotation marks 'transform a sign into a name of that sign'. (Davidson, 1979, p.84, footnote 10) A similar idea has been mentioned by Quine in Mathematical Logic, where he suggests that a quotation '...designates its object ... by picturing it.' (Quine, 1940, ch.4)

The idea that a quotation pictures what it is about seems very attractive in that it can explain the relation between an expression and the quotation-mark name of that expression. But the difficulty with regarding quotation marks as a device for indicating that an expression within refers to itself is that it does not explain how picturing is relevant to the quoted expression referring to itself. The idea of picturing, Davidson argues, is

unnecessary if the quotation marks are already understood as creating a context in which an expression refers to itself:

...once the content of the quotation is assigned a standard linguistic role, the fact that it happens to resemble something has no more significance for semantics than onomatopoeia or the fact that the word 'polysyllabic' is polysyllabic (Davidson, 1979, p.84)

Davidson argues, that although the picture theories of quotation, suggested by Reichenbach and Quine, fail to explain the relation between an expression and a quotation-mark name of that expression, they at least show that it is possible to treat quotations as having some structure, i.e. that we can think of them as composed of quotation marks and the quoted expression. This has a great advantage for Davidson's attempt at the semantic taming of quotation, for the demand for structure is the fundamental requirement of his theory of meaning for a learnable language. If every quotation were a semantical primitive, i.e. a structureless expression, a language containing an infinite number of quotations would be unlearnable.

Attributing some structure to quotation, allows us also to think of quotation marks as a device for indicating that the expression within has to be taken as doing something different from what it does in its normal context. The capacity of quotation marks to create a context in which an expression can assume a different referential role has a familiar connection with Frege's analysis of the oblique contexts created by such words as 'says', 'thinks', 'believes', to which Russell also referred as verbs of propositional attitudes.

Frege was first to realize that in reported speech we are confronted with a linguistic device which creates a context within which the references of words and

expressions cannot be regarded as truth functions of their usual references. There are, however, some important differences between the contexts created by verbs of propositional attitudes and the context-creating feature, which the picture theory of quotation attributes to the quotation marks. As Davidson pointed out, in direct quotation, every expression becomes a name or description, which is not what happens in oblique contexts. Also, in quotation and not in other contexts, expressions without sense 'make sense'. For instance:

All mimsy were the borogoves
is, by itself, a meaningless expression, but, enclosed in quotation marks, can become part of a meaningful proposition. Nevertheless, there is a striking similarity between the function of verbs of propositional attitudes and quotation marks, if we think of them as a linguistic device which creates a context within which words assume different referential roles.

Davidson argues that although the possibility of quotation-mark expressions being regarded as structured expressions offers some advantage to a theory of meaning for a learnable language, the 'context-creating' interpretation of the quotation marks brings out the need for a competent theory of quotation to be subordinated to a general theory of truth. For the trouble with this interpretation of reported speech is that the references of the words in their special contexts are not functions of their references in normal contexts. Therefore, the seeming advantage of the theory which does not lend itself to truth-functional analysis fades away.

Geach suggested another possibility for dealing with this particular problem. His idea was that while a single name in quotation marks names itself, a longer expression within quotation marks can be replaced by a structural descriptive name of that expression using words as the primitive units of language. Thus, he proposes that

"Alice swooned" is really an abbreviation of "Alice" - "swooned" which stands for an expression which must be read as ' "Alice" followed by "swooned"'. (P. Geach, 1957, 79ff.)

Geach's idea that the quotation-mark names are abbreviations for the structural descriptions of these names is, in fact, similar to Tarski's proposal. Geach, however, suggests words as the smallest units of language, while Tarski proposes to replace quotation-mark names by structural descriptions using letters as the smallest units. But the spelling theory of quotation does not really explain the function of the quotation marks for neither replacement, whether using words, or letters, has adequate means in their primitive vocabulary to refer to the quotation marks. In fact, the 'spelling theory' shows that the quotation marks can be eliminated from language altogether when the new names of the primitive units, letters or words are introduced. For instance, the quotation marks in the expression 'Dogs bark' can be eliminated by using the 'letter' method to describe it as:

Dee-oh-gee-es-space-bee-ay-ar-kay

Although this description shows how quotation marks can be eliminated from language, Davidson is right to point out that neither Geach's nor Tarski's suggestion really explains the device of quotation. The 'spelling theory' of quotation does not say anything about the rule for the use of this device but merely suggests how we can do without it. However, this last conclusion is not quite correct, for the spelling theory cannot be applied to all uses of quotation in a language. For instance, the spelling theory fails to account for the use of quotation in sentences in which the quoted material is used rather than only mentioned:

Quine says that quotation '...has a certain anomalous feature'

According to the spelling theory, we can replace the expression which follows the word 'quotation' in this sentence by a structural name of this expression. It is obvious, however, that what follows the word 'quotation' cannot be replaced by a structural name, for the whole expression, i.e. 'Quine says that quotation has a certain anomalous feature', would cease to be a grammatical sentence.

There are other important uses of quotation in a natural language which the 'spelling theory' cannot accommodate, e.g. it fails to explain how else than by enclosing it within the quotation marks a new notation can be introduced into language. It also leaves out the use of quotation as a simple device for teaching foreign language based on a new alphabet, e.g. Arabic or Chinese. As all these are quite common functions of quotation, Davidson is right that a theory which is incapable of dealing with them cannot be regarded as an adequate theory of quotation in a natural language.

Davidson's critical assessment of the previous attempts to give a theoretical explanation of how quotation functions in a natural language enabled him to formulate a list of conditions to be satisfied by a competent theory. A correct explanation, he says, must first of all recognize the semantic role of the devices of quotation, i.e. quotation marks or their verbal equivalents. A competent theory must also explain the connection between an expression and the quotation-mark name of that expression; it must explain the sense in which the quotation refers to itself, and which is embodied in the informal rule governing its use, i.e. a quotation-mark name is formed by putting quotation marks around the token of the expression we want to refer to. As a final requirement, an adequate explanation of the use of quotation must satisfy the conditions required by a general theory of truth for the sentences of the language.

These conditions have been discussed earlier and they are required to support Davidson's contention that Tarski's theory of truth can, after all, be extended to the natural languages. Only a theory which satisfies all these conditions can be regarded as a competent theory.

Some of these conditions, however, generate problems for Davidson's plan to formulate a general theory of meaning for all sentences of the language, including those containing quotations. The primary difficulty centres on the problem of how to combine the necessary requirement for an articulate structure of quotations with the need for an adequate theory to explain the sense in which a quotation pictures what it refers to. Davidson suggests that the only way is to give up the assumption that the quoted material is part of a semantically significant structure of the sentence. He proposes to regard the quoted expression not as part of the sentence but merely as a token, or an inscription:

... what I propose is that those words within quotation marks are not, from a semantical point of view, part of the sentence at all. It is in fact confusing to speak of them as words. What appears in quotation marks is an inscription, not a shape, and what we need it for is to help refer to its shape. On my theory, which we may call the demonstrative theory of quotation, the inscription inside does not refer to anything at all, nor is it part of any expression that does. (Davidson, 1979, p.90)

The function of referring is performed by the quotation marks themselves which point out that a token of an expression is to be found within the quotations marks. On Davidson's theory, neither the whole quotation, i.e. the quotation marks plus the quoted material, nor the expression itself, is a singular name. It is a 'demonstrative' theory according to which the quotation marks are to be understood as a device for pointing to

inscriptions and utterances; a device which says: 'the expression with the shape here pictured'. (Davidson, 1979,p.90) Consequently, the quoted material can easily be removed from the sentence in which it does not play any significant role. Thus, using Davidson's method:

'Dogs bark' is a sentence
can be re-written as:

Dogs bark. The expression of which this is a token
is a sentence.

In the re-written form, demonstrative 'this' performs the function of the 'arrows of quotation' by pointing to whatever token is in its range. This makes quotation a special case of demonstrative expressions. Therefore, the success of Davidson's theory of quotation must depend at the end on whether we are prepared to accept as adequate his explanation of the role of demonstratives in a formal theory of truth.

2. Oratio Obliqua.

Compound sentences in indirect speech have always presented problems for the theorists who attempted to give a truth-functional analysis of language. The difficulties stem from the fact that the truth values of sentences in indirect discourse do not, in any obvious way, depend upon the truth values of their parts. For example, the truth value of 'Galileo said that the earth moves' does not depend, in any way that would seem relevant to the truth of the whole sentence, on the truth value of 'the earth moves'. This puzzling feature may give rise to a disquieting thought that sentences in indirect speech contradict the law of substitution, the law which allows us to substitute co-referring expressions without affecting the truth of the whole sentence. For in accordance with the law, the truth value of a compound sentence 'p & q' must remain unchanged when either 'p' or 'q' are replaced by another sentence with the same truth-value. The problem is that the substitutivity law does not seem to apply to the sentences in reported speech. For we cannot safely infer from 'Galileo said that the Moon is Earth's nearest neighbour in space' and 'The Moon is Earth satellite' to 'Galileo said that Earth's satellite is its nearest neighbour in space'.

Frege attempted to deal with the exceptional nature of some verbs, which have since been called verbs of 'propositional attitudes', by explaining that they create an 'oblique' context in which a subordinate sentence does not have its customary reference. A 'that-clause' which follows verbs of 'propositional attitudes' does not refer to the truth value, which would have been its normal reference. In the 'oblique' context, Frege says, a sentence refers 'indirectly'; it has as its reference the thought which it ordinarily expresses and which ordinarily constitutes its sense. Thus, 'the earth

moves', which follows 'Galileo said that ', has as its reference the thought that the earth moves and not the truth-value which it would have in normal circumstances.

Frege has been criticized for having to appeal to intensional objects in trying to explain the logical form of sentences in *oratio obliqua*. But, as Davidson pointed out in his paper 'On Saying That', even if we were willing to accept the reality of intensional entities, Frege's theory would not be amenable to requirements set by Tarski's definition of truth. Frege's proposal does not imply a rule by which one can recursively explain how the reference of the intensional complexes depends on the reference of the simple ones. His language contains an infinite number of entities, i.e. senses, which can be attributed to every referring expression, depending on how the expression is understood by a speaker. (Davidson, 1968, p.99) It is the lack of finitude which makes a theory like Frege's incompatible with Davidson's project.

Frege had some important reasons for trying to preserve the principle of substitution applying to all sentences which have already been discussed in the earlier part of this thesis. It was crucial to his truth-functional analysis of language that the truth-values of the assertoric sentences could be determined by the truth values of the constituent parts and remained constant when those parts were substituted by co-referring expressions. Frege appealed to the intensional notion of a thought as the sense of a sentence in order to explain the apparent failure of extensionality when dealing with quotation and indirect speech. He needed to show that both forms of reported speech had to be regarded not only as exceptional but also as unaffecting his main thesis, i.e. that every meaningful sentence has as its reference either the True or the False.

However, Frege's doctrine of a distinction between sense and reference of expressions has not solved as

much as was expected. Some of the difficulties with Frege's proposal were already pointed out by Russell in 'On Denoting'. Russell who quoted Frege's own principle, i.e. that sense determines the reference of an expression but the reference does not determine its sense, argued against Frege's distinction by considering a by now well-known example: 'George IV wanted to know whether Scott wrote Waverley'. As already discussed, Russell based his objection on the grounds that no analysis could determine the sense of an expression in *oratio obliqua* and therefore, the distinction would not yield a coherent explanation of the structure of expressions in opaque contexts.

Unfortunately, Russell's own attempt to explain the logical form of sentences containing verbs of propositional attitudes were, by no means, more successful. His purely extensional analysis of a sentence in reported speech. e.g. 'Othello believes that Desdemona loves Cassio', in terms of a relation between an object and a proposition, ended up in a failure. The peculiar nature of verbs, which he named as verbs of propositional attitudes, forced him at the end to regard beliefs as a new 'species' for his inventory of the world. (Russell, 1918, 226)

Since then there have been a few attempts at accounting for the logical form of the troublesome verbs of propositional attitudes. For instance, Carnap suggested that sentences of the form 'S believes that p', could be analysed in terms of a speaker's disposition to consent to a sentence intentionally equivalent to e.g. the English sentence 'p'. (Carnap, 1947) However, Carnap's suggestion requires a cumbersome reference to a language and, as Davidson pointed out following Quine's criticism, it invokes all the problems of translation between the speaker's own words and the language in which his words were reported. On the other hand, Scheffler

proposed that a sentence in indirect discourse could be analysed as expressing a relation between a speaker S and the utterance of a that-p predicate. (Scheffler, 1954) His theory, however, offers no account of any logical relations that depend on the structure in the predicate needed by a Tarski-style theory of truth. Quine went even further, for while he accepted Scheffler's suggestion that sentences in indirect discourse relate a speaker and an utterance, he proposed to treat the whole expression 'said-that-p' as a one place predicate, true or false of a person who uttered it. (Quine, 1960, ch.6) It may seem that since this proposal obliterated completely all structure of the content sentences it would have solved the problems with the troublesome logical relations within the sentences in oratio obliqua. But Quine's analysis of sentences in oblique contexts as one-place predicates abolished completely the structure needed to incorporate indirect discourse within a truth theory of the type proposed by Davidson.

The review of the various explanations of the logical structure of sentences in oratio obliqua has brought Davidson back to Quine's earlier discussion of the quotational approach to sentences in indirect speech. In his book 'Word and Object' Quine rejected the quotational interpretation in favour of another view which proposed that the content sentence in oratio obliqua should be understood as an utterance of a speaker, at a time. On this interpretation, the sentence 'Galileo said that the earth moves' should be interpreted as meaning 'Galileo spoke a sentence which in his mouth meant what "The earth moves" now means in mine'. Quine thought, however, that this interpretation was also cumbersome and chose to follow the line proposed by Scheffler in 'An Inscriptiional Approach to Indirect Quotation'.

Although Davidson found Quine's later proposal

incompatible with his own project, he came to believe that his original idea to analyse sentences in indirect discourse in terms of a predicate relating the original speaker, a sentence and the present speaker of the sentence in indirect speech, was 'nearly right' and deserving a 'more serious consideration'. (Davidson, 1968, p.102) Inspired by Quine's abandoned idea, Davidson has put forward an initial claim that 'S said that p' involves reference to an utterance of a present speaker related to an utterance of the original speaker by samesaying. This means, we should regard some utterance of Galileo as meaning what the words 'the earth moves' mean in the mouth of the present speaker. This suggestion requires, however, that we accept some heuristic gloss which Davidson applied to the original sentence 'Galileo said that the earth moves' in order to get to its logical form. For as Davidson was the first to point out, our sentence does not quite say that Galileo and the present speaker of the sentence in indirect discourse are samesayers. In fact, on Quine's quotational theory which inspired Davidson analysis, it is quite impossible to present a speaker of a sentence in indirect discourse and the original speaker, as samesayers. Davidson explains:

For the theory brings the content-sentence into the act sealed in quotation marks, and on any standard theory of quotation, this means the content-sentence is mentioned and not used. In uttering the words 'The earth moves' I do not, according to this account, say anything remotely like what Galileo is claimed to have said; I do not, in fact say anything. My words in the frame provided by 'Galileo said that ---' merely help help refer to a sentence. (Davidson, 1968, p.104)

As it is, Davidson's intention of representing the original and a present speaker as samesayers has not yet

got a foothold. But before I show how Davidson proposed to make up for the obvious deficiency of his initial claim, it is necessary to draw attention to the surprising nature of the appeal itself.

Davidson appeals to the idea of samesaying, i.e. a judgement of synonymy between two utterances : 'Galileo uttered a sentence that meant in his mouth what "The earth moves" means now in mine'. Although he warns that 'we should not think ill of this verbose version of 'Galileo said that the earth moves' because of apparent reference to a meaning ('what "The earth moves" means')', and that he does not treat this expression as a singular term, nevertheless, his appeal does not prevent one from raising some uncomfortable questions. For instance, Susan Haack has pointed out that while Davidson insists that the truth conditions be given in terms of an absolute definition of truth, i.e. a definition which does not use semantic primitives, he, nevertheless, regards the appeal to samesaying in the metalanguage as admissible. (S. Haack, 1978, p.126) In reply to this kind of criticism, Davidson added a footnote to the original text :

Strictly speaking, the verb 'said' is here analysed as a three-place predicate which holds of a speaker (Galileo), an utterance of the speaker ('Eppur si muove'), and an utterance of the attributer ('The earth moves'). This predicate is from a semantic point of view a primitive. The fact that an informal paraphrase of the predicate appeals to a relation of sameness of content as between the utterances introduces no intentional entities or semantics. Some have regarded this as a form of cheating, but the policy is deliberate and principled. (Davidson, 1968, p.104, footnote 14)

In the same footnote, Davidson added that in the present discussion he is concerned with questions of logical

form and not the analysis of individual predicates. This comment was probably meant as an answer to objections like Haack's, but I do not think that it quite succeeded in dispelling the doubt whether we can regard the appeal to 'samesaying' as admissible. For it is hard to think about the 'sameness of content' between the utterances without appealing to the meaning of these utterances. And this may become rather uncomfortable for a theory which was designed to dispense with the troublesome meanings altogether.

Leaving the questionable nature of Davidson's appeal to the idea of 'samesaying', on which his analysis of sentences in oratio obliqua is founded, we can now come back to the analysis of Davidson's proposal as regards the logical form of those sentences. Davidson stresses in the footnote which has been already quoted, that it is the logical form of sentences in indirect discourse which is his main concern and not the analysis of individual predicates as his critics misinterpreted. The proposal is this:

sentences in indirect discourse...consist of an expression referring to a speaker, the two-place predicate 'said', and a demonstrative referring to an utterance. Period. What follows gives the content of the subject's saying but has no logical or semantic connection with the original attribution of a saying. (Davidson, 1968, p.106)

Accordingly, Davidson suggests that the sentence 'Galileo said that the earth moves' can be presented as consisting of two independent sentences:

Galileo said that. The earth moves.

This must still be understood as an initial claim only, but it is obvious that if it is proven right, it can be very useful for Davidson's project. For if a sentence in oratio obliqua does consist of two semantically independent sentences, we can explain the appearance of

failure of the law of extensional substitution as due to 'our mistaking what are really two sentences for one'. If it can be shown that a sentence, e.g. 'Galileo said that the earth moves', is really a compound of two semantically independent sentences : 'Galileo said that' and 'The earth moves', then, there is no reason to suppose that any change in the truth value of the second should have a bearing on the truth of the sentence which precedes it. Though, of course, Davidson points out, if the second utterance had been different in any way at all, the first utterance might have had a different truth value, for the reference of the 'that' would have changed.

There is, however, a flaw in this proposal. For although there is no difficulty with the logical analysis of the content sentence 'The earth moves' (we can take it as the present speaker's own words which refer in their usual way to the earth and its movement), Davidson has not yet shown that the relational predicate 'said' is really a significant part of the first sentence. It is at this point that Davidson's argument is particularly vulnerable and open to question regarding the methods which he uses. For Davidson offers an explanation which, on his own account, is not to be taken as a proper analysis, but merely as an informal, heuristic account of 'said'. It begins with the interpretation of the sentence 'Galileo said that the earth moves' as:

Some utterance of Galileo and my next utterance
make us samesayers.

from which it follows that if the speaker can provide some matching utterance of Galileo, it will make him and Galileo 'samesayers'. 'If', Davidson says, 'Galileo's utterance "Eppur si muove" made us samesayers, then some utterance of Galileo's made us samesayers.' By utilizing this heuristic gloss Davidson suggests a way of

representing any utterance of Galileo, providing it matches an appropriate utterance of the present speaker, as:

for some x, (Galileo's utterance x and the speaker's utterance y makes them samesayers).

What is now needed is a suitable expression to replace y which refers to the speaker's utterance. In our sentence, this is done by the speaker uttering : The earth moves. It is then, Davidson says, that our sentence in indirect discourse can be shown as compounded of two semantically independent sentences:

The earth moves. Galileo said that.

In this form 'that' is taken to perform its original function of a demonstrative singular term referring, in this case, to an utterance. By reversing the order, the logical role of the demonstrative 'that' can be made even more perspicuous:

Galileo said that. The earth moves.

The utterance 'Galileo said that' simply announces a further utterance which no longer needs to be considered as a significant part of the sentence in indirect discourse:

What follows gives the content of the subject's saying, but has no logical or semantic connection with the original attribution of a saying.

...from a semantic point of view the content-sentence in indirect discourse is not contained in the sentence whose truth counts, i.e. the sentence that ends with 'that'. (Davidson, 1968, p.106)

Davidson believes that his account of the logical form of sentences in indirect discourse as a compound of two semantically independent sentences has advantage over the attempts of his predecessors. It explains, he argues, the standard problems with oratio obliqua and yet, unlike Frege's analysis, it does not require appeal to

intensional entities. It also preserves the structure of a 'content' sentence which makes it compatible with the requirements of the theory of meaning. It can also explain the apparent failure of the law of substitutivity when applied to both forms of sentences in reported speech. For the similarity between the accounts of the sentences containing quotation-mark expressions and indirect discourse is striking. Davidson's analysis showed that both types of reported speech are concealed demonstrative constructions. This, Davidson hopes, greatly improved his chance for a theory of natural language, for he has already argued that the demonstratives are amenable to formal treatment.

Davidson's explanation of why the truth value of a compound sentence in oratio obliqua does not depend in any obvious way on the truth value of its component expressions, is, no doubt, the most original part of his account. It seems that the logical independence of what follows 'that' can, indeed, explain the apparent failure of extensionality. This would have to be regarded as the most obvious measure of success of any coherent theory of indirect discourse. For given that independence, the question of rules relating the truth value of the utterance which follows the demonstrative 'that' to the truth-value of the first utterance, need not arise at all. Although, of course, assuming the 'that' refers, the truth-value of the first utterance might be affected by any changes of the second utterance, for the reference of 'that' would have changed. By splitting a sentence in indirect discourse into two logically and semantically independent sentences (utterances) Davidson suggested that the structure of both sentences should be handled independently by a theory of meaning. This would also resolve the problem why the customary inferences break down with indirect discourse, i.e. why 'S said that p' does not entail 'p'.

These claims which Davidson ascribes to his analysis of indirect discourse would be quite possible, I dare say, had it not been for the disquieting questions regarding the foundations from which these claims have been issued. For as I have argued, at the heart of Davidson's analysis of indirect discourse lies a questionable notion of a semantic primitive of 'samesaying' which dangerously relies on a judgement of synonymy between two utterances. It is possible to argue that the very same notion of 'meaning' which Davidson wanted to expel is employed in his argument in the guise of a heuristic device of 'samesaying'. Even though, Davidson felt compelled to defend his view against this criticism, it still leaves one with the possibility of questioning the methods which Davidson should be permitted to employ in the course of his investigations, and what devices should he be allowed to use to benefit his enterprise. It seems to me that these questions, as well as the others which have been already discussed earlier, must be settled before one can say that Davidson's analyses of the 'old issues' have fulfilled the hope raised by his original project which promised a Tarskian-style theory of meaning for a language, as we use it in daily discourse.

VIII. CONCLUSIONS

In the previous chapters I have discussed a number of proposals which were put forward in this century to illuminate the notion of meaning and to explain how language functions. The various attempts to offer a systematic account of the workings of language in the form of a theory of meaning have stemmed from an increased awareness that understanding how language functions deeply matters to philosophy. It became obvious that philosophy deals with problems whose nature is often distorted by our lack of understanding of the linguistic forms in which these problems are posed. Thus, language and the theory of meaning have become the central concern of philosophy. However, for all the interest that the study of language attracted in this century, and the many attempts that have been made to account for its workings, there has been no agreement as to what shape a theory of meaning should take.

Frege was first to focus attention on the active role that language plays in formulating philosophical problems and the lack of clarity in understanding its forms. Hence, the doctrines which he put forward in order to clarify the nature of language and meaning were the obvious choice to begin my search for a satisfactory theory of meaning. Frege's first task, and his great achievement was to show that language is a public phenomenon and that the theory of meaning has to deal with the essentially public features of language. The 'Sinn', i.e. the sense of a name and the thought expressed by a sentence cannot be 'a part of a mode of the individual mind' but must be public, i.e. common to many. (Frege, 1892b, 29) He saw that public communication and the possibility of transmission of a

'common store of thoughts and propositions' from one generation to another could not be explained by private ideas. Frege thought that while the reference of a name, or a complex expression would be the object represented by this name, he also thought that a name had a 'public' meaning, i.e. sense, which made it possible for many speakers to refer to one and the same object. Although his theory of meaning employs the intensional notion of sense (Sinn), nevertheless, it is essentially a theory of public discourse.

Russell agreed with Frege that the influence of language on philosophy was profound. But while he agreed that private 'ideas' have to be expelled from the theory of meaning, he also rejected the idea that something other than reference can be a public meaning. He argued against Frege's distinction between sense and reference as wrongly conceived. Meaning, for Russell, had to do first, with 'immediate objects of experience', and later, as his theory developed, with 'immediate objects of acquaintance'. He strongly believed that the meaning of expressions is the object to which we refer when using these expressions. Thus, Russell became the first proponent of a referential theory of meaning.

Wittgenstein, like Frege and Russell, believed that many difficulties in philosophy arise from our failure to understand the logic of our language. But he thought that many philosophical questions are not false but simply nonsensical. He believed that philosophy, unlike the natural sciences, does not deal with truth or falsity; its aim is the logical clarification of thoughts.

The distinction between sense and nonsense, rather than truth and falsity, stands behind the picture theory of meaning which Wittgenstein offered in the Tractatus. By assimilating propositions to complex names Frege has blurred the distinction between the different functions that names and propositions perform in language. In

contrast, Wittgenstein's picture theory relies on preserving this distinction. For while Wittgenstein concedes that names have meanings, i.e. the objects which they represent in a proposition, he also says that every proposition must have a sense. They have a sense in virtue of being a possible picture of reality; propositions represent possible states of affairs. Wittgenstein pointed out that it is only when we compare a proposition with the possible state of affairs which it represents that the question of its truth and falsity arises.

Most of the Tractatus aimed at finding the most general form of a proposition, by reference to which, 'the essence of all descriptions, and thus, the essence of the world' could be unravelled. By the time Wittgenstein wrote the Philosophical Investigations, his views about language and meaning had changed radically. While he still thought it was possible to understand how language functions, he gave up the search for a unifying feature of language in virtue of which meaning could be explained. Instead of seeking for a grand theory of language, he proposed to 'look and see' how language is actually used. He no longer thought that meaning could be explained by speculating about language, or by looking for something beneath the surface which could be brought to light by philosophical analysis. He saw that 'having sense' cannot be defined by reference to some possible combinations of the mysterious 'atoms' of reality but as 'being used' in a particular linguistic situation, i.e. as 'being in circulation'. But it is misleading to think that Wittgenstein is defining the meaning of an expression in terms of its use, or that he is proposing a new theory of 'meaning-as-use'. He is merely suggesting that by looking at an expression in its ordinary use, we can get a better picture of it than by thinking of what it 'means'.

In the Philosophical Investigations Wittgenstein

criticizes his former search for a theory of language and insists on looking at 'facts of language' without constructing dogmas about it, in spite of the urge to do so. He came to believe that the aim of theorizing about language is not seeking for new information, or a new theory, but arranging what has always been known. Thus, the Philosophical Investigations marks the beginning of a different view about how one should go about solving philosophical problems.

Philosophical problems, Wittgenstein said, arise when language 'goes on holiday', when it is misused. Following this lead, many linguistic philosophers concentrated their efforts on examining the uses of expressions which they thought were responsible for many of the philosophical puzzles. This trend gave rise to some criticism. For instance, Ayer wrote that 'the current philosophical emphasis on fact as opposed to theory, has been overdone'. (A.J. Ayer, 1960)

Davidson's proposal, which was first indicated in his paper 'Theories of Meaning and Learnable Languages', is the most recent attempt at theorizing about language that resulted in a fully fledged theory which claims to know how to account for the meaning of all sentences of the natural language. Davidson's idea was very simple. He first stated a minimal number of conditions to be satisfied by a competent theory of meaning and then pointed out that these conditions have been already spelled out by Tarski's Convention T. The rest of his project has been designed to prove that a Tarski-style theory of truth provides the foundations for a competent theory of meaning.

Each of these theories has been discussed in details in the previous chapters. The choice of Frege's theory as the starting point of the search for an adequate theory of meaning has been obvious. He was the first to give language its prominent place and to offer an explanation

of its working in the form of a theory of meaning. While Russell and Wittgenstein followed Frege in that they also realized how much language matters to philosophy, each had quite different things to say about language and meaning. Davidson's proposal must be regarded as the most drastic example of the lack of consensus among the philosophers as to what form a theory of meaning should take. Not only did he think that neither Frege's account of meaning in terms of the intensional notion of sense nor Russell's referential theory was satisfactory, he also implied that a mere description of language without the employment of a theory is useless. Davidson could not accept any previous theory of meaning as giving a satisfactory account of meaning. He came to believe that the notion of meaning has been too much misused to be of any constructive use for his theory and proposed to dispense with it altogether. He suggested a way of thinking about meaning without actually employing the troublesome notion. His theory of meaning is couched in the theory of truth.

The lack of consensus as to the most general requirements on the form which a theory of meaning should take only indicates a great difference of opinions as regards the proposed solutions to the particular problems. In the Introduction, I have proposed that Frege's theory should be used as the base for all theorizing about language and meaning. My assumption has certainly turned out correct, for the problems which Frege identified constitute the unifying link in most of the discussions about language in this century. This may be more clear as far as Russell's and Wittgenstein's theories are concerned and not so immediately obvious in the case of Davidson's theory. But Frege's context principle has been employed in Davidson's holistic view of meaning and his theory has been tested on the problems of language which Frege first tried to solve.

I have argued that Frege's contextual principle which he formulated in the Introduction to The Principles of Arithmetic was one of his most widely accepted ideas. There can be no doubt that the principle exerted influence on the theories of meaning which followed its exposition. It certainly appeared almost verbatim in Wittgenstein's picture theory of language. But if we agree, as I have argued, that the influence of Frege's principle extends to Wittgenstein's views in the Investigations, then of course, we can also think of language-games as its expanded form. The principle in the guise of language games cannot, of course, mean the same as when it was put forward by Frege. Nevertheless, we can think of the context principle in its expanded form as not only reflecting Wittgenstein's changed views on how to go about finding what words and expressions mean but also, as in accordance with Frege's original idea. Frege's context principle, together with the first rule, were originally the expression of his concern with undesirable psychological influences on scientific research and his intention to avoid any subjective ideas. We can think of Wittgenstein's expanded form of the principle in the Investigations also as implying the 'public' element of meaning. However, this is, probably, where the similarity has to terminate, for 'meaning' in Frege's theory is not what it came to mean for Wittgenstein in the Philosophical Investigations. Wittgenstein thought that language is a social phenomenon and meaning has something to do with social activities; it cannot be discovered by analysis.

Davidson also endorses Frege's principle but he thinks that it's scope is too narrow to reflect the nature of meaning. He therefore proposes that the right way to express the holistic feature of meaning is to expand Frege's principle to the whole language. This has a great advantage for his theory for it enables him to dispense with the itemizing account of meaning which caused so many

problems in the past.

In spite of the controversy about the role and the value of the principle in Frege's theory of language, the principle, without any doubt, must be recognized as one of his ideas which has continued to exert a great deal of influence. I have argued that in later Wittgenstein, and in Davidson, the scope of the principle has been expanded in accordance with their different views about meaning. Nevertheless, the real value of the principle remains the same, i.e. that we can talk about meaning only in the context of something else.

It appeared that one of the most persisting and difficult problems for any theory of meaning was how to account for the unity of propositions. Frege sought for an explanation in the 'unsaturated' nature of concepts and relations which he contrasted with the 'completeness' of objects. Although he had some difficulties in explaining the nature of the incompleteness, he thought that only a radical distinction between concepts and objects can explain how a proposition becomes a unit of thought.

The problem of the unity of propositions presented a much more serious problem to Russell's referential theory of language. In the Principles of Mathematics Russell insisted that every word in a proposition stands for a genuine constituent, i.e. is a 'term'. This extraordinary view demanded an explanation why a proposition was not just a string of words. Russell found himself struggling with the problem of unity by ascribing to some of the propositional items a two-fold capacity. He was forced to propose that, in contrast to 'things' which are indicated in a proposition by proper names, the linguistic counterparts of concepts, i.e. predicates and relational expressions, can occur either as concepts-as-such, or as the subjects. However, the extraordinary capacity of adjectives 'to denote' and the indefinable feature of

verbs 'to relate', as well as to occur in propositions as logical subjects, instead of solving the problem, generated further difficulties. For Russell's explanation as implied by the two-fold capacity of verbs can only be applied to true sentences.

The problem generated by what Russell defined as the indefinable feature of verbs to relate the terms of a proposition remained unresolved not only in the Principles of Mathematics but also, it continued to cause insoluble problems for Russell when later, he tried to explain the logical form of propositions containing verbs of 'propositional attitudes'. As to the other form of concepts, i.e. those which denote, Russell found a radical solution in 'On Denoting' where he showed that the property of denoting can be removed altogether. This, however, has not solved the problem of how the meaning of a sentence is generated from the meanings of its constituents. Although Russell thought that there must be a theoretical solution to the problem of the unity of propositions, he was unable to offer a completely satisfactory explanation.

In Wittgenstein's Tractatus, the problem hinges on the disputable nature of objects. I have argued that the problem of the nature of objects must remain an open question. For, if we approach Wittgenstein's objects from the background of the doctrines of atomism, it seems that the existence of objects as the simples of reality is necessary for these doctrines to make sense. The structure of the arguments in the Tractatus seems also conducive to this particular interpretation of the logical status of objects. For Wittgenstein's pronouncements about the nature of the world are presented at the beginning of the Tractatus and seem to invite an interpretation of what follows, i.e. his pronouncements about the nature of objects and representation, from the standpoint of logical atomism. The existence of simple objects, i.e.

the residue of a complete analysis, appears necessary for the picture theory of representation and the principles of logical atomism, i.e. isomorphic representation and terminable analysis, to make sense. I do not think it is quite possible to ignore what Wittgenstein says about e.g. the correlations of the picture's elements with objects, (T.2.13) or, about the correspondence of the elements of a propositional sign to the objects of the thought.(T.3.2)

On the other hand, if we agree with Kenny that Wittgenstein's theses about the world follow, 'both historically and logically' those about the language, we can get at a different picture of objects.

Anthony Palmer suggested in his recently published book that when we approach Wittgenstein's Tractatus from the background of problems about the unity of a proposition, 'that is from the background of the problem which for Russell in The Principles of Mathematics required a special sense of 'denoting', and for Frege required a radical distinction between concept and object, it looks a very different work from the way it has often been presented.'(A. Palmer, 1988, p.42) For if we stop thinking about the doctrines in the Tractatus as Wittgenstein's version of logical atomism, we do not need to worry that what he says about names and objects appears inconsistent with the philosophy of logical atomism. We can then stop thinking about the objects as identifiable 'atoms' and reject the itemising account of propositions. Then, the picture theory of propositions really acquires a different meaning.

I have argued that a confusing picture of the Tractatus objects emerges from trying to reconcile the doctrines of logical atomism with the views implied by Frege's contextual principle which Wittgenstein incorporated in his theory of propositions. Thus, if it is a mistake to ascribe to Wittgenstein a philosophy of logical atomism, we can make sense of the 'incompleteness' of objects and

their ineffability outside the states of affairs in which they occur. We can also reject the need to speak about the parts of a proposition in any other sense than the sense which we give to the context principle.

Davidson is also concerned with the problems generated by the itemising accounts of the meaning of propositions. He insists, however, that a theory of meaning must give an account of how the meanings of sentences depend upon the meanings of words. He thinks that, unless such an account is given, we cannot explain how any language can be learnt. But Davidson thinks that postulating meanings has 'netted nothing', not because they are abstract or that their identity conditions are obscure, but because paradoxically, 'the only thing meanings do not seem to do is to oil the wheels of a theory of meaning'. (Davidson, 1967, p.20):

Frege said that only in the context of a sentence does a word have meaning; in the same vein he might have added that only in the context of the language does a sentence (and therefore a word) have meaning. (Davidson, 1967, p.22)

I have argued that the extended form of the contextual principle to language as such, directed Davidson towards the holistic concept of meaning. It enabled him to dispense with the need to talk about 'meanings' and 'parts of sentences' in the theory of meaning altogether, and to show instead that meaning belongs to the logical form of language. In Chapter 6 I have discussed Davidson's 'discovery' that Tarski-style definition of the truth-predicate offers a perfectly adequate way of showing what a sentence means by appealing to the logical structure rather than the troublesome 'meanings'. Thus, the problem of the unity of proposition has vanished from the 'truth' theory of meaning together with the need for an itemising account of language.

The test of adequacy of any theory of meaning, and

especially a theory which claims its origin in a truth theory for a natural language, must, without any doubt, consist in its ability to deal with the problem of paradoxes. Frege realized that his attempt to eradicate the contradiction inherent in Axiom (V) was not very successful. Nevertheless, he did not intend to diminish the importance of Russell's discovery and admitted that the foundations of his work were badly shaken. 'Even now' he said in reply to Russell, 'I do not see how arithmetic can be scientifically established; how numbers can be apprehended as logical objects, and brought under review; unless we are permitted - at least conditionally - to pass from a concept to its extension'. (Frege, 1903, Appendix, p.214)

The importance of the 'logical' paradoxes involving concepts of 'class', 'membership', etc. to a theory like Frege's, or the Liar paradox, and its variants, to the theory of truth, has been recognized since they were discovered. Their existence has become of serious philosophical concern because the problems which they generate involve a large portion of a language in which 'self-referential' sentences may occur. This portion of a language cannot be ignored by any competent theory which must apply to the whole language.

Russell suggested that the problem of paradoxes required a formal solution, i.e. a statement of the formal conditions for a consistent theory, and a philosophical explanation of why certain inferences were unacceptable. His theory of types was designed as a formal solution while the 'vicious circle principle' was offered as a philosophical explanation. Russell divided the universe of discourse into a hierarchy of different types, e.g. individuals, sets of individuals, sets of sets of individuals, etc., to which he ascribed variables with a corresponding 'type-index'. Then, he defined as well-formed only those expressions referring to a class-

membership in which the type-index of a member is one lower than that of a class. This restriction blocks the possibility of expressing the property of not being a member of itself. In a similar way, Russell's ramified theory imposed a hierarchy of orders of propositions and propositional functions, together with the restriction that a proposition can only contain a quantifier which ranges over propositions of a lower order than itself. Thus, the Liar sentence has also become inexpressible in a language formalized by the theory of types.

I have argued that both Russell's solutions run into difficulties. His formal solution, i.e. the theory of types has blocked certain desirable inferences which forced him to introduce new axioms. At the philosophical level, the vicious circle principle has been also criticized as stated without sufficient precision and not applicable to all cases of the self-referential sentences. Nevertheless, one can regard Russell's attempted solution as, at least, a recognition of the importance of the problem of paradoxes and the threat it has posed to logical and truth theories of language.

Like Russell, Tarski also recognized that the occurrence of paradoxes in natural languages presented a serious problem for a theory of truth which should not be ignored. Natural languages, he thought, give rise to paradoxes because they contain the means of referring to their own expressions, as well as the semantic concepts 'true' and 'false' which cannot be eradicated without radically changing the language. He came to the conclusion that it was impossible to supply a theory for a language which generates paradoxes, i.e. a language which is 'semantically' closed. He thought that the only way to avoid paradoxes was to make 'true' and 'false' relative to a formally specifiable language, for which the theory is given. This meant the introduction of a hierarchy of languages, starting from the object

language O, then, meta-language M which contains means of referring to O, as well as predicates 'true-in-O' and 'false-in-O', then again, meta-meta-language M' which contains means of referring to M, etc., each formally specifiable.

The hierarchy of languages enabled Tarski to avoid paradoxes by differentiating between the language for which truth is being defined and the meta-language in which truth-in-O is defined. Thus, the Liar paradox has been transformed into a harmless sentence 'This sentence is false-in-O', which is itself a sentence of M, and hence, cannot be true-in-O. But the hierarchy of languages could not be imposed on natural languages. Therefore, Tarski did not believe that it was possible to define 'true' in any other way than as true-in-O; he thought that his definition of truth could only be applied to the artificial languages with formally specifiable structure.

In spite of Tarski's scepticism, Davidson is determined to find a theory of meaning which can apply to natural languages. He insists that Tarski's Convention T offers a perfectly adequate paradigm for his theory. I have argued in Chapter 6, that if Davidson's programme is to succeed, he must show that Tarski's scepticism was unfounded. However, Davidson has nothing to offer in order to show that Tarski's theory can be extended to natural languages. I found his enthusiasm for a 'thankless task' admirable but not sufficiently justified.

The existence of paradoxes has been well documented as a real threat to logical and truth theories. Davidson is also aware of their importance. Therefore, his decision to carry on with his project 'without having disinfected this source of conceptual anxiety', is not only surprising in view of his holistic conception of meaning but is also unacceptable on account of his proposal to regard meaning as belonging to the logical structure of language. As the

paradoxes are generated by the structural features of language, one must be suspicious of a theory which cannot dispel this particular anxiety. Davidson claims that by applying Tarski's method, suitably 'tidied up', to those fragments of natural languages where the danger of paradoxes does not apply, he has succeeded in revealing something about the nature of these problems. I think, however, that the success of his response to Tarski's scepticism could only be justified if he had also succeeded in those other areas where the danger of paradoxes does arise.

In the Introduction I have said that my search for a theory of meaning was initiated by the disappointment with Davidson's highly-promising new approach to the theory of meaning. I thought that his programme offered a new way of theorizing about language and meaning and showed the way out of an impasse which, following later Wittgenstein, the philosophers preoccupied with the analysis of the uses of expressions had found themselves in. With the wisdom of hindsight, Davidson suggested that none of the previous theories of language could offer a satisfactory explanation of what meaning is. I have followed his lead and examined the ways in which different philosophers tried to illuminate the notion of meaning and to offer an insight into how language works.

It turned out that Davidson was right. In spite of a number of proposals which were put forward in this century in order to explain the nature of meaning I have found that none offered what can be described as a satisfactory theory of the workings of language. There has been no consensus among philosophers even about the most general form their explanations must take. This disagreement has also been reflected in the interpretations and the analyses of the particular problems which language presented. The various analyses have, without any doubt, contributed to clarification of

the particular issues but when carefully thought through, they always appear to be hinged on some controversial assumption. This is why Davidson's proposal seemed to me very attractive. Davidson proposed to leave behind the troublesome way of talking about meaning, or meanings, and to see whether we can state the old issues more clearly by talking about something else instead. The idea was good. For it seems that if we can re-phrase the questions concerning meaning as the question concerning understanding a language we shall avoid the whole host of troublesome issues. But can we do that? Davidson obviously thinks that in Tarski's material adequacy condition for a definition of truth he found a perfectly good model for his theory of meaning. But a competent theory of meaning, just like an adequate theory of truth, has to apply to the whole language. It was not until I had realized that Davidson's programme ignored completely a large portion of language which escapes Tarskian treatment that I became suspicious of his whole enterprise.

It may now seem that having argued against the competence of some theories which have been put forward in order to explain the puzzlement about language and meaning, I shall be able to suggest, at least by a process of elimination, what theory, if any, can count as competent. The problem is that given the conclusions already reached in the previous chapters, I do not think that any theory can be contrasted with those against which I have argued. I have no suggestion as to what a correct theory of meaning must be like, or what other questions it must answer besides those that have already been raised.

In the Philosophical Investigations, Wittgenstein wrote about our propensity to establish an order in our knowledge. It may be that the only way available to us to establish such an order in our thinking about language is to seek for a theory which can systematize our ideas

about it. But as he said, it may be that in philosophy we can only establish an order with one particular end in view; 'one out of many possible orders; not the order'. (Wittgenstein, P.I., 132) I would prefer to think that the order has not yet been established rather than that it cannot be established at all.

BIBLIOGRAPHY

Ayer, A.J., Russell and Moore: The Analytical Heritage,
(Macmillan, 1971)

Carnap, R., Meaning and Necessity, (Chicago U.P., 1947)

Davidson, D., Inquires into Truth and Interpretation,
(Clarendon Press, Oxford, 1984)

Truth and Meaning:

- 1965, 'Theories of Meaning and Learnable Languages'
- 1967, 'Truth and Meaning'
- 1970, 'Semantics for Natural Languages'
- 1973, 'In Defence of Convention T'

Applications:

- 1968, 'On Saying That'
- 1979, 'Quotation'

Diamond, C., 'What Nonsense Might Be', 1981, in Ludwig Wittgenstein: Critical Assessments, vol.II, ed.

S.Shanker, (Croom Helm, 1986)

Dummett, M., FREGE Philosophy of Language, 1973, (2nd edn.
Gerald Duckworth, London, 1981)

Frege, G., Begriffsschrift, 1879, in Philosophical Writings of Gottlob Frege, ed. P.Geach & Max Black,
(3rd edn., Blackwell, Oxford, 1980)

- 1884, Die Grundlagen Der Arithmetik, English translation by Austin, The Foundations of Arithmetic, (Blackwell, 1950)
- 1891, Function und Begriff, English translation by Geach, 'Function and Concept' ed. Geach and Black, (Blackwell, 1980)
- 1892a, Uber Begriff und Gegenstand, English translation by Geach 'On Concept and Object' ed. Geach and Black, (Blackwell, 1980)
- 1892b, Uber Sinn und Bedeutung, English translation by Black 'On Sense and Meaning' ed. Geach and Black, (Blackwell, 1980)
- 1893, Grundgesetze der Arithmetik, I, (H. Pole) partial

- English Translation in Furth The Basic Laws of Arithmetic, (California U.P., 1964)
- 1903, Grundgesetze der Arithmetik, II, (H. Pole) partial English translation including Appendix, pp.253-65 (Frege on Russell's Paradox) by Geach ed. Geach and Black, (Blackwell, 1980)
 - 1918, Der Gedanke, English translation by Quinton and Quinton, 'The Thought: A Logical Inquiry', Mind, 1956, reprinted in Philosophical Logic, ed. P.F. Strawson, (Oxford, 1983)
- Geach, P. Mental Acts, (Routledge and Kegan Paul, London, 1957)
- Haack, R. 'Davidson on Learnable Languages', Mind, 1986
- Haack, S. Philosophy of Logics, (Cambridge U.P., 1978)
- Hacker, P.M.S. 'Laying the Ghost of the Tractatus', 1974, in Ludwig Wittgenstein: Critical Assessments, vol.I, ed. S.Shanker, (Croom Helm, 1986)
- Kenny, A. Wittgenstein, 1973, (reprinted Penguin, 1980)
- 'The Ghost of the Tractatus', 1972, in Ludwig Wittgenstein: Critical Assessments, ed. S.Shanker, (Croom Helm, 1986)
- Kripke, S. Naming and Necessity, 1972, (revised edition, Blackwell, 1980)
- Mattews, R. 'Learnability of Semantic Theory' in Truth and Interpretation, ed. E.Le Pore, (Blackwell, 1986)
- Mill, J.S. A System of Logic, London, 1843.
- Quine, W.V.O. Mathematical Knowledge, (Harper and Row, 1940)
- Word and Object, (Cambridge, Mass., 1960)
- Palmer, A. Concept and Object, (Routledge, London, 1988)
- Pears, D. Bertrand Russell and the British Tradition in Philosophy, (Fontana, 1967)
- Rhees, R. 'Wittgenstein's Builders' in Discussions of Wittgenstein, (Routledge & Kegan Paul, 1970)
- Russell, B. The Principles of Mathematics, vol.I, (Cambridge, 1903)

- 1905, 'On Denoting', in Logic and Knowledge,
(R.C.Marsh, George Allen and Unwin, London, 1956)
 - 1908, 'Mathematical Logic as Based on the Theory of
Types' in Logic and Knowledge, ed. Marsh, (George
Allen and Unwin, London, 1956)
 - 1911, 'Knowledge by Acquaintance and Knowledge by
Description' in Problems of Philosophy, ch.V, (Oxford,
1912)
 - 1918, 'The Philosophy of Logical Atomism' in Logic and
Knowledge, (R.C.Marsh, George Allen and Unwin,
London, 1956)
 - 1967, Autobiography, (George Allen and Unwin,
London, 1967)
- Russell, B. and Whitehead, A.N. Principia Mathematica,
(Cambridge U.P.,1910-1913)
- Sainsbury, M. Russell, (Routledge & Kegan Paul, London,
1979)
- Scheffler, I. 'An Inscriptional Approach to Indirect
Quotation' in Analysis, 10, (1954)
- Smart, J.J. 'How to Turn the Tractatus Wittgenstein into
(Almost) D.Davidson' in Truth and Interpretation,
ed. Le Pore, (Blackwell, 1986)
- Strawson, P.F. 'Singular Terms and Predication', 1961,
Journal of Philosophy, 57.
- Tarski, A. 'The Concept of Truth in Formalized Languages',
1936, reprinted in Logic, Semantics, Metamathematics,
transl. J.H.Woodger, (Oxford, 1956)
- Wittgenstein, L. Tractatus Logico-Philosophicus, 1921,
English translation by D.F.Pears & B.F.McGuinness,
(Routledge & Kegan Paul, 1978)
- Philosophical Investigations, 1953, English
translation G.E.M.Anscombe, 1961, (Blackwell, Oxford,
1981)
 - Notebooks 1914-1916, ed. G.H.Wright & G.E.M.Anscombe,
1961, (2nd ed. Blackwell, Oxford, 1979)