THE CONCEPT OF MEANING IN
WITTGENSTEIN AND SCHLICK
AN EXAMINATION OF
THE CONCEPT OF MEANING IN
WITTGENSTEIN AND SCHLICK

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SCOPE AND CONTENTS: To examine the concept of meaning in Wittgenstein's Tractatus, and to contrast this with the concept of meaning of meaning in the Logical Positivism of the Vienna Circle, as exemplified in Moritz Schlick's article "Meaning and Verification". I have examined the Picture Theory of Meaning, and the doctrine of 'showing forth' in the Tractatus, and found these to be dependent upon an a priori view of logic. In Schlick I examined the Verifiability Criterion of Meaning, discussed the claims it made, and claimed that this too must be accepted pre-theoretically. Finally, I compared the position of the two, and attempted some evaluation as to their success in eliminating metaphysics, and, in Schlick's case, establishing a sound basis for science.
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INTRODUCTION

Happy if we can unite the boundaries of the different species of philosophy by reconciling profound enquiry with clearness, and truth with novelty! And still more happy, if, reasoning in this easy manner we can undermine the foundations of an abstruse philosophy which seems to have hitherto served only as a shelter to superstition and a cover to absurdity and error. 1

Thus heralded Hume, apparently very optimistic about the future of philosophy once all these metaphysical works of superstition and absurdity had been burnt on the bonfire of the enlightenment. And Kant too, awakened by Hume from his 'dogmatic slumbers' showed a similar optimism. He believed his Critique to hold the key to the solution of all philosophical problems, and at the end of this work asks whether it may not be possible: "to achieve before the end of the present century what many centuries have not been able to accomplish: viz. to secure for human reason complete satisfaction in regard to that which it has all along so eagerly occupied itself, tho' hitherto in vain." 2

This surely was optimism and expectancy.


But 130 years later, by the time of Wittgenstein's *Tractatus Logico-Philosophicus*, this 'complete satisfaction' had not yet been attained, for philosophers evidently believed that problems still existed. But were these genuine problems? Apparently not, for Wittgenstein asserts that the reason why these problems are posed is - not because they concern fundamental issues, nor because no-one has yet been able to give satisfactory answers, but - because the logic of our language is misunderstood. In fact we learn from him that "Most of the propositions and questions to be found in philosophical works are not false but nonsensical. Consequently we cannot give any answer to questions of this kind, but can only establish that they are nonsensical." ³

So Wittgenstein too believed himself to have found "on all essential points, the final solutions of the problems" But the promise of excitement and great achievement we were given by Hume and Kant is shattered, as the author of the *Tractatus* concludes on the sad note :"And if I am not mistaken in this belief, then the second thing in which the value of this work consists is that it shows how little is achieved when these problems are solved." ⁴


⁴ *Tractatus*, Author's Preface p.5

References to the *Tractatus* will now follow the quotation in the body of the text, and will be identified by giving the number of the proposition - e.g. (5.25)
The earlier Wittgenstein himself seemed to be a man torn in two ways. He showed a sensitivity towards metaphysical and religious assertions - Carnap witnesses to the 'internal struggle' which seemed to take place in him. And yet he held a firm conviction that these statements were meaningless - mere utterances, without cognitive content. This same conviction greatly influenced the Logical Positivists of the Vienna Circle, who adopted and developed what they claimed as Wittgenstein's theory of meaning, whilst rejecting the metaphysical status of his work. Much of what they did seems to be an attempt at carrying out the prescription made by Wittgenstein at the end of the *Tractatus*:

"The correct method in philosophy would really be the following: to say nothing except what can be said - i.e. propositions of natural science - i.e. something that has nothing to do with philosophy - and then, whenever someone else wanted to say something metaphysical, to demonstrate to him that he had failed to give a meaning to certain signs in

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his propositions. Although it would not be satisfying to the other person - he would not have the feeling that we were teaching him philosophy - this method would be the only strictly correct one." (6.53)

What I propose to do in this thesis is to examine the concept of meaning in Wittgenstein's Tractatus and in Schlick's article "Meaning and Verification", and this will involve an uncovering of the presuppositions of each. Fundamental to the Tractatus is Wittgenstein's concept of logic, and this underlies the necessity for the existence of simple objects, the status of elementary propositions, and the relationship between language and the world. All necessity becomes logical necessity, the only possibility of any significance becomes logical possibility, and the common element between propositions and facts is logical form. For in the Tractatus Wittgenstein is examining this relationship between the structure of the world and the structure of language, but in doing so he is doing the (logically) impossible. The common element, this logical form, cannot be expressed but only shown forth. There can be no statements about logic, for all that can be said is within the realm of logic and is conditioned by logic. Thus the Tractatus is a unique book: the statements expressed within it can be expressed only once. For once they have been expressed they stipulate a condition which rules out the possibility of their expression. That is why at the end of the book Wittgenstein admits that anyone who understands the Tractatus recognizes
his statements as meaningless: as nonsensical, expressing the inexpressible.

I hope to contrast this with Schlick's position in "Meaning and Verification" which was an article written in reply to an attack on Logical Positivism by Professor C.I. Lewis. We shall examine the case which he states for the Positivist position, and the way in which he answers the objections brought by Professor Lewis. In this article 'meaning' is inextricably tied to 'verifiability', which for him is the 'possibility of verification'. There are many interesting comparisons with Wittgenstein's position, and many important divergences also. One feels that he has rejected the 'metaphysics' of Wittgenstein's position - and yet assumed the conclusions to which Wittgenstein came as a result of his metaphysics. One of the most significant changes I feel, is in the rejection of the inherent meaningfulness of a proposition. Meaning is connected with logical possibility of verification, and yet this logical possibility is something which we ourselves impose: it is no longer part of the nature or the essence of reality.

My criticisms of Schlick's position will also apply to the Vienna Circle as a whole, insofar as this is a statement of Logical Positivism. I hope to show very briefly that his account of meaning and verification does indeed have much in common with the reduction of all meaningful propositions to protocol statements, which we find in Carnap.

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6 "Experience and Meaning", Philosophical Review March 1934, Vol.45 pp
and Neurath. The possibility of this reduction, and in fact the possibility of the formulation of any criterion of meaningfulness will be challenged in the final chapter. The question of its efficiency in eliminating metaphysics and establishing a sound basis for scientific statements, even assuming that such a principle could be formulated, is also one which should concern us. I hope to investigate these problems much further when Schlick's article is examined.
CHAPTER I. WITTEGENSTEIN'S TRACTATUS

I said earlier that in the Tractatus philosophy constituted the search for the relationship between the structure of propositions, and the structure of reality which they represent. This was not of course the correct method of philosophy, as stated in the Tractatus. According to the correct method, philosophy would "signify what cannot be said, by presenting clearly what can be said" (4.114) and ultimately, as has been mentioned, none of the philosophical statements of the Tractatus can be said. Nevertheless, the quest is pursued for that in common between the proposition which pictures, and the fact which is pictured; for the relationship between the logical constants and the world. I hope to show in what follows how Wittgenstein's understanding of this relationship is rooted in his concept of logic. In order to show this, and to realize that, in fact, this concept of logic underlies and permeates the whole of the teachings of the Tractatus, I propose to examine two basic doctrines found there. An investigation, then, into the picture theory of meaning, and the doctrine of 'showing forth' will be adequate to illustrate this. It will be seen how the very concepts involved in these doctrines are themselves fundamentally
necessary because of Wittgenstein's view of logic. For example, although simple objects are indescribable and imperceptible, they are logically necessary to form the substance of the world. Likewise, 'logical form' which is inexpressible and somehow mysteriously 'shown forth' is logically necessary as the possibility of structure. If we ask why these are logically necessary, the answer is because the only necessity which exists is logical necessity. Logic pervades the world: logic is prior to every experience. Nevertheless, when we have examined these doctrines we shall be justified in asking in what sense, if any, is this view of logic itself necessary.

The Picture Theory of Meaning

A proposition communicates a situation to us, so it must be essentially connected with the situation. And the connection is precisely that it is its logical picture. A proposition states something only in so far as it is a picture. (4.03)

This is the central claim of the Picture Theory of Meaning. A proposition is a picture of reality. (4.021) It pictures a possible state of affairs. And so if we understand a proposition we also know the state of affairs it is picturing. There are two main elements then, involved in this theory. One is the proposition which effects the picturing, and the other is the state of affairs which is pictured. The theory extends to the whole of the world, and to the whole of language for the totality of facts is the world, and the totality of propositions is language. So it would seem that if we knew the totality of propositions then we would know every
possible situation which could be represented.

We are told then that a proposition pictures a fact, but before we could understand the significance of this, we would have to know what is a proposition. One answer we are given is that "A proposition is a truth-function of elementary propositions. (An elementary proposition is a truth-function of itself.)" (5.) Of course this necessitates the further question: what is an elementary proposition? And this question is important since the concept of an elementary proposition is essential to the Tractatus. Wittgenstein's answer is that "An elementary proposition consists of names. It is a nexus, a concatenation of names." (4.22) It is his contention then that an analysis of propositions will bring us back to elementary propositions consisting of these names. Yet if the proposition is to have any sense each name must be a name of something, and this 'something' is an object. Just as an elementary proposition needs to consist of names, so a state of affairs needs to be composed of simple objects. What follows from this is that the name, which Wittgenstein calls a 'simple sign' represents the object in the proposition. This is in fact its function. But then Wittgenstein says that the "name means the object. The object is its meaning." (3.203) We cannot take 'meaning' to imply the identification of name and object - although this particular text certainly lends itself to this interpretation. But it would be easy to show that the meaning of a word cannot be an object. We can predicate many things of 'chair' (e.g.
that it has five letters) which cannot be predicated of an actual chair. Wittgenstein himself in the *Investigations* no longer held this view, even if he did actually hold it in the *Tractatus*. In this later work when he asks: "What is the relation between name and thing named?" it would appear that the answer is in our use of the name: when A calls out 'slab', 'block', 'pillar', 'beam', B brings the stone which he has learnt to bring at such a call. This is by no means the same as identifying the name 'slab' with the stone slab. But even if there is some confusion on this point, it is nevertheless important to realize that although Wittgenstein says a name means an object, he also says that it only has meaning in the nexus of a proposition, for only a proposition can have sense. (3.3)

So far we have discovered that a proposition pictures a fact, and that in an elementary proposition names represent simple objects. Now in a picture there must be a one-to-one correspondence between the elements of a picture and those of the thing pictured, and since a proposition is also a picture this same correspondence must hold. I think however, that this can only be maintained for elementary propositions, for only these appear to consist entirely of names which represent objects. However, as we saw, the thesis is that all propositions are analyzable into elementary propositions. We shall consider this claim in greater detail.

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*Philosophical Investigations* Sect. 37, p.18e

later, for it bears marked similarity to the claim made by Carnap that all meaningful propositions can be reduced to protocol statements; although at the same time there is certainly a difference between the elementary statements of the Tractatus, and the protocol statements of The Unity of Science. But for the moment, if we see a proposition as being essentially the truth function of elementary propositions, we can understand that it also is a picture of the situation it describes.

This correspondence between the elements of a proposition and the elements of a state of affairs is expressed when Wittgenstein says:

One name stands for one thing, another for another thing, and they are combined with one another. In this way the whole group — like a tableau vivant — presents a state of affairs. (4.0311)

Therefore to say a proposition has a sense is to say that a proposition represents, or pictures a certain situation.

But a question which has been lurking in the shadows all along, thrusts itself forward at this point and demands an answer. How can a series of names, which is all that constitutes an elementary proposition, have a sense? How can this picture any fact? This indeed seems strange.

If we took a series of any ordinary names: 'Harry, Charles, Marmaduke, George' we would not want to say that this pictured any fact, or that it said anything which could be true or

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false. Even if we were more lenient and allowed a more elastic interpretation of the term 'name', we still could not say that such a string of words as 'George, Marmaduke, Chevrolet, driving, McMaster' pictured any situation. We might say instead that in its present form it has no sense: it tells us nothing, pictures nothing, and can be neither true nor false. The names might certainly have reference to certain objects, but they can hardly be said to be in the nexus of a proposition. And of course, no elementary proposition would consist of such 'names' as these, and yet it is difficult to see how any list of names could be said to be a picture. However, this difficulty cannot really be expressed unless we are sure what it is to be a picture, and what it is for a picture to represent a situation. Consider:
"A picture is a model of reality." (2.12)
"A picture is a fact." (2.14)
If a picture is a model of reality, then it would seem that a group of marks thrown together haphazardly on canvas, with no determinate relation between them would not constitute a picture. Or certainly, it would not constitute a picture of any situation. It seems doubtful whether Wittgenstein would ever think in terms of abstract art when he thought of picturing reality. If my young cousin draws a 'picture' consisting of dirty marks rubbed over a page, and then claims this as a picture of his 'mummy', we would hardly take the claim of likeness too seriously. So even though the intention of the
painter was to paint a picture, this itself does not make the
marks on the page into a picture of any situation. If
Wittgenstein's position is not to involve him in solipsism
then there must be some public recognition that what we see
on the canvas is a picture of that situation: or, in terms
of propositions, that the proposition uttered by A is
publicly recognizable as representing that state of affairs.
It would seem that Wittgenstein is thinking more in terms of
photographing, than painting when he talks of 'picturing'.
If we are to represent the situation in a way in which it is
recognizable as that situation to anyone who sees the
representation, then this is more likely to require an
accurate photograph of that situation rather than an
impressionistic painting. This does mean too to some extent
that we must intend it to be a picture of that situation.
We do not take a photograph of 'x' intending it to be a picture
of 'y'. We can of course try to pass it off as 'y', but if we
understand what the photograph is we know it is a picture of
'x', and we are trying to pull the wool over our friends'
eyes. In the same way we would not use (if we could use) an
elementary proposition which pictures the atomic fact 'a'
to picture the atomic fact 'b'. We could lie about the picture,
but in a sense we could not be mistaken. If we understood
a proposition we would know the situation that it represented.
(4.021) When we compared this situation with reality we would
find either that it did obtain or that it did not. So the
proposition could be true or false. But this is nothing to
do with its having meaning: it has meaning simply by being
able to picture a (possible) state of affairs. So a picture
is a picture simply because it can be compared to reality;
that is, because there is a very definite arrangement of
marks on a page constituting what people would recognise as
a picture. And this picture would be a picture of something.
Furthermore, it is not the marks which make the picture, but
the fact that they are arranged in such and such a manner.

However, we do need this correspondence between the
elements of a picture and the elements of a fact, and as we
saw, this correlation is that the elements of the picture
represent the objects in a state of affairs: "The fact that
the elements of a picture are related to one another in a
determinate way represents that things are related to one
another in the same way." (2.15) The fact that its elements
are related in a determinate way thus constitutes a picture,
and what makes it a picture of a specific situation is that
this determinate relation represents a similar determinate
relation in the situation represented.

All this may perhaps throw some light on to our
problem as to how a series of names can be said to be a
picture. It is not merely that the names represent objects,
but it is also the case that the arrangement of the names
represents the way the objects are arranged in the actual
state of affairs. It is important to realize too that an
elementary proposition cannot be simply a series of names. Otherwise we could make no sense of either of these two statements by Wittgenstein:

"Only facts can express a sense, a set of names cannot." (3.142)

"A proposition is not a medley of words." (3.141a)

By 'concatenation', then, he does not mean an indeterminate series: he means a very definite combination. It is this very fact that the combination of names represents the combination of objects in a situation which makes it a picture of the situation. If the names were arranged in any other order they would not be a picture of that particular situation, even if the same names were being used. It is obvious that if I paint a picture of a field with cows to the left, trees to the right and the farmer in the middle, then it is only a picture of a field where the cows are to the left, the trees to the right, and the farmer in the middle. If I paint the cows in a different position, and the farmer up a tree- it is no longer picturing that situation, even though the elements of the picture are the same. So, in this way, it is the determinate relation of the names to one another which makes a proposition a picture of this situation and not that. In fact it is only this determinate relation of the names which makes it a picture at all. So our problem seems almost resolved. We can say that a series of names pictures a state of affairs because it is not merely an indefinite series, but a specific concatenation.
The very fact of this concatenation makes the series of names into a picture, and "a proposition states something only in so far as it is a picture." (4.03d) Therefore, insofar as it constitutes a picture, the concatenation of names - the proposition - can be true or false by being compared with reality: by examining the correlation.

However, this really does raise a problem which is not so easily solved, nor is it so easily articulated. But the problem concerns this very notion of correlation.

Wittgenstein says on this point:

That is how a picture is attached to reality; it reaches right out to it. (2.1511)
It is laid against reality like a measure. (2.1512)

... ... ...

The pictorial relationship consists of the correlations of the picture's elements with things. (5.1514)
These correlations are, as it were, the feelers of the picture's elements with which the picture touches reality. (2.1515)

Yet the problem of how the picture is to be correlated with reality is a real one. For who is to do the correlating? Presumably it is the agent which pictures. But it seems that before we can say that he must compare a picture with reality, we must first have solved the epistemological problems involved. Indeed, how is he to know what reality is? How is he able to recognise this as a representation of that situation?

It presupposes that all human beings understand the world already, and thus they are now able to compare the reality which they know, and which is self-evident, with propositions picturing various situations. Thus the epistemological questions are left unanswered, or regarded as irrelevant or meaningless.
Epistemology, for Wittgenstein, is the philosophy of psychology, and "Psychology is no more closely related to philosophy than any other natural science." (4.1121) Thus there is no emphasis upon the subject that thinks: in fact there is a definite denial of any such subject. (5.631)

This point is made too when he says:

It is clear . . that 'A believes that p', 'A has the thought p', and 'A says p' are of the form '"p" says p': and this does not involve a correlation of a fact with an object, but rather the correlation of facts by means of the correlation of their objects. (5.542)

This shows too that there is no such thing as the soul—the subject, etc.—as it is conceived in the superficial psychology of the present day. (5.542)

So to be concerned with epistemological problems is, for Wittgenstein, to misunderstand the nature of philosophy and the nature of reality. Such problems cannot be stated: the self does not belong to the world. "What brings the self into philosophy is the fact that 'the world is my world'." (5.641) So just as we cannot discuss beyond the limits of the world, or the limits of language, we can neither discuss the self which is also the limit of the world. "I am my world" (5.63) and '"the world is my world"', but nevertheless, we do not discuss the 'I' but the 'world'. Wittgenstein's position is stated beautifully when he says:

Here it can be seen that solipsism, when its implications are followed out strictly, coincides with pure realism. The self of solipsism shrinks to a point without extension, and there remains the reality co-ordinated with it. (5.64)

So if we accept this position then it is no longer relevant
to ask how we do the correlating. Questions concerning how we can understand reality, or how we recognise a picture as representing that situation, are spurious. The answer is that we can recognize it by comparing it, and the deeper question of how we are able to compare it with the situation, is really not a question at all. If we accept the Picture Theory, then this must satisfy us. No other questions can be asked, for any such questions must be essentially nonsensical.

I would like to raise one final point about correlation, and this can be done by considering two statements in the Tractatus:

In a proposition a thought can be expressed in such a way that the elements of the propositional sign correspond to the objects of the thought. (3.2)

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

We see here the introduction of a term which has not yet been explained: the term 'sign'. And I would now like to investigate this term. In the Tractatus Wittgenstein uses 'sign' both to express a proposition, and to represent objects in the proposition. These latter are, as we have already seen, 'simple signs' or 'primitive signs'. These are not the same as 'propositional signs':

I call the sign with which we express a thought a propositional sign. And a proposition is a propositional sign in its projective relation to the world. (3.12)

What I would like to ask is: is the propositional sign a
picture? There seems to be no evidence in the Tractatus that it is; in fact it seems instead that it might be possible for the propositional sign itself to be pictured. For "A propositional sign is a fact." It seems fairly certain that a propositional sign is not a picture - any more than the marks we splash on a page can be called a picture. The marks can be used to produce a picture, and possibly then the propositional sign can be used to produce a picture. But if we think again about the marks, we can imagine painting a picture, and saying: 'This is a picture of those marks on that page.' Similarly, since a propositional sign is a fact, could we not produce a picture to represent the propositional sign? Could I not take a photograph of a proposition written out in a manuscript and say 'This is a picture of a propositional sign.' Yet I should also be using a propositional sign to express that proposition. And could I then go further and paint a picture of that propositional sign? Because a picture is also a fact, and a propositional sign is also a fact, we could perhaps become involved in an infinite regress of pictures of pictures. This however, is not very important and does not substantially affect the results of the Picture Theory of Meaning. What is more important when considering Wittgenstein's use of 'sign' is to understand it to refer to the perceptible part of a symbol, or to put it more exactly: "what can be perceived of a symbol"(3.32) And it is as referring to, or representing an object that
a simple sign is used. With this in mind let us look again at the statement referred to earlier as the prescription for Positivism:

The correct method in philosophy would really be the following: to say nothing except what can be said, i.e. propositions of natural science—i.e. something that has nothing to do with philosophy—and then, whenever someone wanted to say something metaphysical, to demonstrate to him that he had failed to give a meaning to certain signs in his propositions. (6.53)

What does 'signs' mean here? Obviously not 'propositional signs', nor probably 'simple signs' since these could only be used in an elementary proposition. But if we accept that all propositions are truth-functions of elementary propositions then ultimately it would mean that in the elementary proposition the 'simple signs' had no reference. But this is not the same as the Positivist claim that the metaphysician is uttering the non-empirically testable, or an assertion which cannot in principle be verified. Wittgenstein is rather saying that there is no object to correspond to the sign, the name; the words have no reference, and thus no fact is being pictured. So the fact that metaphysics has no meaning depends upon his metaphysical theory.

I have discussed the actual 'picturing' aspects of the Picture Theory of Meaning, and tried to indicate how Wittgenstein meets the possible objections regarding elementary propositions and correlation. But I would now like to concentrate on one aspect of the theory which I have not yet given much attention. This is the notion of an 'object'.
Simple Objects

We learnt that the world was the totality of facts, not of things (1.1) and yet a state of affairs - a fact - is a combination of things. These 'things' are 'objects', and the way in which they combine yields a particular state of affairs. Now the point of interest here is why particular states of affairs obtain and not others. What permits the objects to combine in certain ways, and not in other ways? For obviously there must be some restraining factor, since if all these objects simply combined at random, then the most incredible states of affairs might result. However, if we are asking 'why are there some facts and not others?' then this question has no sense. To what does 'others' refer? To other facts? Then what are these other facts? Are they possible facts which have never been realized in actuality, or are they impossible facts - in which case they cannot be called 'facts' at all? If, on the other hand, we restrict ourselves to asking the question - 'why can objects combine in certain ways only?' - then this is legitimate, and is answered in the Tractatus.

As we might perhaps expect, the appeal is to logic. "In logic nothing is accidental: if a thing can occur in a state of affairs, the possibility of that state of affairs must be written into the thing itself. (2.012) In this way the future of the object is decided from the beginning. According to its nature it is logically predestined not
to enter certain combinations, whilst the logical possibility of certain other combinations is written into the object. However, the states of affairs which actually obtain are not decided. Logic is prior to the question 'How?', not to the question 'What?'." (5.552) And yet what actually obtains is still limited by what can obtain, so there is no such thing as coincidence or chance. Nothing goes beyond the province of logic. "If things can occur in states of affairs, this possibility must be in them from the beginning." (2.0121 b) From this it follows that "If I know an object I also know all its possible occurrences in states of affairs." (2.0123 a)

But now the problem arises as to what Wittgenstein can mean by "know an object". It seems obvious that he cannot mean knowledge by acquaintance as it would be if I talked about knowing my great aunt, or knowing my pet goldfish. Nor would it be knowledge about a state of affairs, i.e. knowing that something is the case (e.g. that my great aunt has a blue hat, or that my pet goldfish is swimming in its bowl.) It is hardly likely either, to be knowledge by description as it would be if I said I 'know' my friend's great aunt who loves in Australia. How, then is Wittgenstein using this word 'know'? He says: "If I am to know an object, though I need not know its external properties, I must know all its internal properties." So how could I know the internal properties of an object? Perhaps here the accent is more upon 'if' than upon the 'know', and this is
the point. Otherwise, the only meaning we can give to 'knowing an object' seems to be 'knowing that it exists.' But this presents enormous difficulties, for 'object' is a formal concept in the *Tractatus* - not a proper concept-word. Here Wittgenstein argues that all formal concepts (e.g. 'number', 'fact', 'function') are represented by variables, and whenever the words are used wrongly, as proper concept-words, then nonsensical pseudo-propositions result. (4.1272) Therefore, he asserts, it is impossible to say "There are objects" (4.1272)

This would in fact be an example of a pseudo-proposition in the same way that 'x is an object' would fall under this category. The point here is that when the variable is replaced by a name, naming an object, the expression 'x is an object' should give an elementary proposition. But in an elementary proposition an atomic state of affairs must be pictured, and what picture would 'a is an object' provide? What state of affairs is being described here? The answer is none, for the so-called proposition contains only the name of an object, and this is not a state of affairs. An atomic fact is a combination of objects, just as an elementary proposition is a concatenation of names. So it is as nonsensical to say 'x is an object' as it is to say merely 'x'.

Equally, 'There are numbers', or 'There are facts' or 'There are 100 objects' would all be nonsensical. 'I is a number' is not the sign of a genuine function: the replacement of 'I' by a name would not yield a genuine proposition. Therefore:
"To ask whether a formal concept exists is nonsensical. For no proposition can be the answer to such a question." (4.1272) So to say "If I know an object" means "If I know an object exists..." is also nonsensical.

But if existence cannot be predicated of objects what can it mean to talk of 'knowing' an object? It seems indeed that the possibility of 'knowing' these objects in the ordinary sense of the word 'know' is ruled out. From all we have seen it would appear that the only way in which one could know an object would be in its occurrence in a particular state of affairs. I could never say 'I know an object' without stating the situation in which this object occurs. And then it would not be true to say I know the object itself, but only that I know the state of affairs (i.e. the fact that...). I would thus have to infer from the state of affairs to the existence of such an object. So this is all that Wittgenstein can mean when he says 'If I know an object...' namely, 'if I infer...'. But I think we would be justified in asking for a reason for making such an inference.

There are two questions to be distinguished here: 'What is an object?' and 'How can I know an object?' We have been considering the latter, but this is an epistemological problem which cannot be investigated anyway. The former is far more important. One basic teaching is that they are simple and irreducible entities forming

the substance of the world. But this raises a problem. In what way do these objects form the substance of the world? One feels that it is important to know whether Wittgenstein is reifying his 'objects' - whether he regards them as having an actual existence in the empirical world. It could be argued however that when Wittgenstein uses the word 'world' he is not talking about the physical or empirical world - but this is merely a term designating the subject matter of logical analysis. It is meaningless to ask whether the world is real or no; or whether the objects are real or no. In this case it is a futile debate as to whether 'things' are 'things' - in the way that a realist regards chairs and goldfish bowls as 'things' - or whether 'things' are merely logical postulates. Since he is not talking about the physical world the question simply does not arise. If however one does maintain that Wittgenstein is talking about the world in which we live, then one has a problem regarding the ontological status of his objects.

Yet if we accept objects merely as theoretical postulates, the problem is not entirely dismissed, for the question may still be asked: why are they postulated, and to what extent are they necessary? The answer to this question will lead us back to review the whole of Wittgenstein's position regarding logic.

We are given no description or the qualities of objects - for they have none. Copi was therefore correct to argue that Wittgenstein's objects are "bare particulars having
no material properties whatsoever.\textsuperscript{10} But the accent here must be on the word 'material'. It is true that no qualities can be predicated of objects. They are colourless, spaceless timeless\textsuperscript{11} and it is not unreasonable to deduce that they are also tasteless, shapeless, motionless and without size or smell. They have absolutely no resemblance to things which we would call 'objects'- tables, chairs, goldfish bowls. For Wittgenstein of course, these are not objects at all. They are rather configuration of objects: they are facts, and these facts are pictured by the proposition.

For it is only by means of propositions that material properties are represented—only by the configuration of objects that they are produced.\textsuperscript{(2.0231)}

And yet, it would be wrong to say that they are without properties altogether, for Wittgenstein mentions that they have both internal and external properties. The internal properties seem to be this possibility of their combining to form certain states of affairs. Each of these possibilities is part of the nature of the objects, and if all objects are given then all possible states of affairs are also given.\textsuperscript{(2.0124)} The external properties then, could probably be understood as their actual occurrence in states of affairs.

But now, granted that the 'objects' are theoretical postulates, of which we cannot predicate

\textsuperscript{10} Copi: "Objects, Properties and Relations in the Tractatus", Mind April 1958 p.163.

\textsuperscript{11} Wittgenstein does not talk of objects being spaceless and timeless, but I think this is what must be understood by taking 2.0252 with 2.0251.
which we can attribute no material properties, the question arises - what, if anything, is the relation between these theoretical postulations and our material objects? Or, in other words, what is the relation between Wittgenstein's 'things' and our 'goldfish bowls': or between his objects and his states of affairs? (For as we have seen, what we regard as 'objects' are really combinations of objects - 'facts' - in the language of the Tractatus.) If a state of affairs is only a configuration of objects, all of which have no material properties, then how do these properties arise in the state of affairs? To understand this we must take into account two further terms, viz, 'structure' and 'form'. We have seen that in a state of affairs the objects stand in a determinate relation to one another, and this determinate relation is the structure of the state of affairs. 12 But 'form is the possibility of structure.' (2.033) The possibility of an object occurring in a state of affairs is the form of the object. So it is through this 'form' that the 'structure' takes place, and through this 'form' that material qualities are produced when objects combine. "Space, time colour (being coloured) are forms of objects." (2.0251) So these colours or spatio-temporal relationships so not obtain in objects by themselves; they obtain only in configurations of objects: in states of affairs. Only the possibility of all this is part of the nature of an object. "A speck in the visual field, though it need not be red, must have some colour: it is so to speak surrounded

12 Cf 2.03-2.032
by colour space. Notes must have some pitch, objects of the sense of touch some degree of hardness and so on." (2.0131)

So: "Objects contain the possibility of all situations." (2.014)

A problem arises with regard to this 'form'. Wittgenstein clearly did not see this in the way that Kant saw it: namely that we impose the space and time upon objects through our pure intuitions. He presupposed that the 'forms' were essentially connected with the objects, not with the perceiver. This follows naturally when we think back upon his dictum concerning the self. But we are now in a state of perplexity regarding these 'objects'. They are stripped of everything which would make them intelligible to us, and the only way in which any material properties obtain is through these 'forms'. But where do these 'forms' reside? Or is there no sense in asking this question? I think the only way in which we can understand Wittgenstein's notion of 'form' is by saying it is simply the possibility of structure. But this in itself is perhaps not entirely satisfactory.

The whole idea of objects remains mystifying. In spite of having nothing we would recognise as properties, and in spite of being bound up with the equally mystifying notion of 'form' we are left with the statement that they nevertheless make up the substance of the world. But even the word 'substance' seems to have been deprived of all its usual connotations. Berkeley rejected the Lockean substance— something
"I know not what"\textsuperscript{13} is redundant\textsuperscript{14}. Berkeley rightly argued that rather than postulate a supra-sensory world 'behind' the world we perceive, one could reject the notion of a material world altogether. And in his famous division of primary and secondary qualities Locke did indeed argue that the secondary qualities' (touch, taste, colour etc.) 'belonged' to the perceiver, but nevertheless he postulated the primary qualities' as somehow inherent in the objects themselves.\textsuperscript{15}

It is true that Locke's 'substance' was mysterious and unnecessary, yet in so far as it formed a basis for his 'primary' qualities, an argument for it could be maintained. However, with Wittgenstein's 'substance' there are no primary qualities or any other qualities which can be predicated of it. All we know or it is that it "subsists independently of what is the case." (2.024) That is to say, if all the present states of affairs did not exist, this 'substance' would somehow still be subsisting, and there would still be the possibility that these states of affairs might obtain. But if the Lockean substance was redundant, how can we claim anything more of the Wittgensteinian substance, which, if anything, is no more mysterious and incredible than anything Locke held. There seems at first to be no reason why Wittgenstein should maintain this theory of substance and

\textsuperscript{13} Locke: Essay Concerning Human Understanding Bk 2 Chap. XXIII Sect. XIV-XX (p. 216 London, Ward Lock & Co.)

\textsuperscript{14} Berkeley: Principles of Human Knowledge Pt. I Sect. 16-24 (p. 36 London, Brown and Sons, 1937)

\textsuperscript{15} Locke: Essay Chap VIII, Sect 3 pp. 85ff
simple objects, particularly since all we previously understood by 'substance' occurs only in states of affairs. If we took substance in this earlier sense we could ask why Wittgenstein goes further than the atomic states of affairs and try to reduce these still more. If we took any particular fact as an example and reduced it to its basic elements we should see the redundance of any of the former notion of substance. If we took a goldfish bowl and broke it down to its basic particles, we would still not find these 'simple objects' For what is 'substance' other than the physical atoms which compose a particular thing? Are Wittgenstein's objects any more respectable than Locke's? Something "I-know-not-what"? Is Wittgenstein really maintaining the existence of some metaphysical entity beneath the physical, numerical, spatial, and kinematic components of a particular thing?

I think it must be maintained that he is not. At least, not in the same sense in which Locke asserted his substance. For Wittgenstein's 'simple objects' were not physical, but logical components. He arrived at them through the process of inference. And yet, at the same time one cannot deny that these were definitely metaphysical, for once we have analyzed - e.g. - a goldfish bowl - into its physical particles, into its size, shape, number, possible energy, there is little left which can be 'substance'. On this theory of 'physical substance' it would indeed be very

16 Locke's Essay -note 13
difficult to imagine what these 'objects' could be, out of which the state of affairs known as a 'goldfish bowl' emerges. One feels justified in concluding that they are not anything at all. Yet, we shall see that on Wittgenstein's basis they are absolutely necessary.

Objects are unalterable and subsistent: it is their configuration, the states of affairs they make up, which is changing and unstable. One is reminded of the old Greek search for the 'physis' of things: the stable and permanent nature amid the flux. In a sense, Wittgenstein's 'objects' have much the same character as Thales' 'water' or Anaximenes' 'air'. Yet we must not oversimplify the position of the Tractatus. Admittedly, the unalterable form of the world is constituted by 'objects', but more than that, these objects are completely essential for the meaningfulness of any proposition. "If the world had no substance, then whether a proposition had meaning would depend on whether another proposition was true." (2.0211) and, most crucially: "In that case we could not sketch out any picture of the world (true or false)." (2.0212)

We can perhaps begin to see the need for the logical simples of the Tractatus. They are needed to combine and make states of affairs; they are needed for names to represent them in elementary propositions; they are needed essentially for the Picture Theory of Meaning. But in each case the existence of any one of these is logically dependent upon the existence of the others. If we hold up the elementary
proposition as the reason why we need simple objects (i.e. in order that the 'names' in the proposition will have 'meaning') then we must say why the elementary propositions are necessary. We may claim that it is because they must picture the facts, and these facts must be configurations of objects. But for this no other argument is given; it is accepted a priori. It is quite true that because of his theory simple objects are necessary, yet there is no reason why this theory is itself necessary. He does state that it would be impossible for a god to "create a world in which the proposition 'p' was true without creating all its objects." (5.123) But this is no argument. He says also "If we know on purely logical grounds that there must be elementary propositions, then everyone who understands propositions in their unanalyzed form must know it." (5.5562) However, do we know this on 'purely logical grounds'? It seems highly dubious. We still do not know what an elementary proposition could be. I said our problem was almost solved, but there remains perhaps a slight feeling of uneasiness. We are told: "Elementary propositions consist of names. Since, however, we are unable to give the number of names with different meanings, we are also unable to give the composition of elementary propositions." (5.55) The only 'purely logical grounds' for the necessity of elementary propositions is that they are needed to picture states of affairs. But what is required in picturing states of affairs is that the names
in the concatenations known as elementary propositions must correspond to the simple objects in the atomic facts. Yet we have seen that the only logical necessity for simple objects is that the world must have substance, for which the only grounds are that the elementary propositions can picture states of affairs. Thus there has been a revolution of 360° and we have turned once more for the 'purely logical grounds' for our knowledge that there must be elementary propositions. So each element of Wittgenstein's system is very intricately interwoven. His terms are all inter-definable and all have meaning within the system. But if we try to abstract them from the whole system, which is what I believe the Positivists did, then the meaning which they had no longer holds. One cannot really criticise Wittgenstein for the tightness of his system: although one may want to criticise him if one cannot 'cash' the terms he uses. But as it stands Wittgenstein's system is extremely well worked out, and each proposition entails the rest, in terms of the whole. Therefore any final criticism we give must be criticism of the whole.

The notion of a simple object is therefore essential to the Picture Theory of Meaning, and this theory is fundamental to the Tractatus. According to the Tractatus to have sense meant to picture a possible state of affairs. This possibility, as we saw, was prescribed by logic, and the possible configurations in which it could occur were written into the nature of the 'thing itself. It did not matter for the 'sense' of the proposition whether the state of affairs actually
existed or not: if the possibility was there, and if the names in the elementary proposition corresponded to the objects forming the possible configuration then the proposition had meaning. When no meaning could be given to the various signs in the proposition: if the names named nothing: then it was logically impossible for the proposition to picture anything, and the proposition was nonsensical. No experience is necessary in deciding whether or not a proposition has meaning in the Tractatus. Experience tells us whether a state of affairs actually exists or not, and therefore whether it is true or false. And this presupposes it has a sense. (4.064)

But whether or not a proposition has a meaning is a purely logical matter: this is asking whether a picture is possible, whether the situation it claims to picture can exist. The possibility of this object occurring in that state of affairs is a fact of logic: "Logic deals with every possibility and all possibilities are its facts." (2.0121b)

There are however two classes of expressions which are not nonsensical, and yet still have no meaning. These are tautologies and contradictions. They are not pictures of facts (4.462) They do not represent any one possible situation for the former admits all situations and the latter none. (4.464) They are the two extreme cases amongst the possible groups of truth conditions. (4.46) The proposition stands mid-way; "A tautology's truth is certain, a
proposition's possible, a contradiction's impossible."(4.464)
This has often been expressed by using the terms 'necessarily true' for tautologies, and 'necessarily false' for contradictions. And this necessity is logical necessity, just as the possibility of a proposition's being true is logical possibility. Logic is the determining factor in each case. Logic prescribes the limit of meaning. Logic prescribes the limits of what can be thought or said. A proposition cannot have sense unless what it pictures is logically possible.

Ultimately, then, we must investigate this whole concept of logic. The Picture Theory of Meaning is certainly dependent upon this concept of logic, but there is another vital issue in the Tractatus to be examined, which will indicate still further how logic becomes the metaphysical basis of the work. I am referring to the doctrine of 'showing forth'. This is connected with his picture theory in that although propositions describe a situation they cannot describe their own meaning.

**Doctrine of 'Showing Forth'**

A proposition says - this is how things stand: and if it is true, it shows how they stand.(4.022) The sense of the proposition cannot be pictured, but must be shown forth. And what can be shown cannot be said. (4.1212) This is the doctrine in brief, and we see it as the crux of the Picture Theory. But it is yet more fundamental than this. Earlier in the thesis it was said that Wittgenstein was concerned to
establish what language and the world had in common. There are two ideas here: that which a picture has in common with what it depicts, and that which a proposition has in common with what it pictures. These are of course closely interwoven since a proposition is a picture. (4.01) The question here then is not: how do we know that this proposition is a picture of that situation? We have already seen that Wittgenstein does not recognize 'epistemological' questions as having sense. The answer to such a question can only be: we know that it is a picture of 'x' by comparing it with 'x'. (2.223) Nor is the question here about the elements in a picture corresponding to the elements of a fact. We are not asking what elements of the propositional sign correspond to the objects of the thought. The answer to this would be that "in a picture the elements of a picture are the representatives of objects" (2.131) or that in a proposition names deputise for objects.

What in fact we are searching for is that which is in common between any complete situation and the picture or proposition which truly pictures it; for that which is in common between the totality of situations and the totality of propositions; for that which is in common, then, between the world and language. Wittgenstein tells us definitely: "There must be something identical in a picture and what it depicts
to enable the one to be a picture of the other at all."

(2.161) Propositions must have something in common with reality in order to be able to picture it. It seems obvious now that what we are searching for cannot be an element within a proposition, or within a state of affairs. It must be something to do with the structure of a picture, a proposition, and a fact. The structure of a picture is the connection of its elements (2.15) and the possibility of this structure is the pictorial form of the picture. And it is this which a picture must have in common with reality to be able to picture it (2.17) "A picture has logico pictorial form in common with what it depicts (2.2) It is by means of the pictorial form that it represents what it does represent - independent of its correctness or incorrectness. In the same way a proposition - a picture - has logical form in common with the reality it pictures. (4.12)

Now that we have discovered this common form we may return to see the full significance of the doctrine of showing. For in being shown the sense of a proposition, we are being shown its logical form - its common element with the situation it represents. A proposition is powerless to picture this form. The form must show itself. This is why Wittgenstein says "A picture cannot however depict its pictorial form: it displays it." (2.172) A picture represents its subject from its representational
form—i.e. from a position outside it. It cannot however place itself outside its representational form. (2.173-4)

In the same way:

Propositions can represent the whole of reality, but they cannot represent what they must have in common with reality in order to be able to represent it—logical form. (4.12)

This logical form must show itself: it must express itself in language. We must find its reflection in propositions. This is why "Propositions show the logical form of reality." (4.121)

It is now possible to see that we have arrived at the root of the Tractatus. The Picture Theory of Meaning is indeed crucial, and so are the concepts of simple objects, atomic facts and elementary propositions. But all these find their importance and necessity in Wittgenstein's concept of logic. We saw in the Picture Theory that for a proposition to have sense it had to picture a possible state of affairs, which was a configuration of simple objects. Also, that these objects were necessary to give point to the notions of elementary propositions, atomic facts and the Picture Theory of Meaning. But the only reason why objects should combine in certain ways to produce states of affairs seemed to be that they had the 'possibility' of this combination written into their nature. It was discovered that this 'possibility' depended upon logic, which determined every possibility, and every
necessity. In the 'doctrine of showing' we saw next that a proposition can represent the whole of reality, but not the 'logical form' which it has in common with it. Everything is constructed according to this self-displaying form:

A gramophone record, the musical idea, the written notes, the sound waves, all stand to one another in the same internal relationship of depicting that holds between language and the world. They are all constructed according to a common logical pattern. (4.14, italics mine.)

Is Logic a priori?

It is now our duty to ask why logic has such a force in the Tractatus. Logic, we are told, pervades the world; the limits of the world are also its limits. (5.61) We cannot stand outside the world and say 'the world has this in it, and this, but not that.' (5.61) Logic is prior to every experience. (5.552) In logic there are no surprises. (1.251) In logic nothing is accidental. (2.012) Thought can never be of anything illogical. It is impossible to represent in language anything that contradicts logic. (5.473) We cannot make mistakes in logic. (5.473) "Logic is not a body of doctrine, but a mirror image of the world. Logic is transcendental." (6.13) There can thus be no statements about logic (except those of the
Tractatus which, as the author admitted, were meaningless.)
Logic prescribes the possibility of structure, the possibility of states of affairs, the necessity for simple objects, the necessity for logical form. We cannot represent logical form - for in order to do so we should have to station ourselves with propositions somewhere outside logic, i.e. outside the world. And that is impossible - logically impossible. Logic thus provides the metaphysical basis of the Tractatus. The whole work finds its root in and takes its meaning from this one concept of logic. But what justification can Wittgenstein give for holding this view of logic? Why does logic pervade the world? Why is it prior to every experience? Wittgenstein gives us this reason: "What makes logic a priori is the impossibility of illogical thought." (5.4371)

On the surface this seems plausible: - when we examine the statement, however, it is almost tautologous. What sort of 'impossibility' does Wittgenstein mean? He can only mean the 'logical' impossibility of illogical thought. What is being said then? It would make as good sense to say that the reason for the (logical) impossibility of illogical thought is that logic is a priori. So in fact Wittgenstein is not giving a reason at all. The (logical) necessity of logical thought depends upon the a priori character of logic, and the apriori character of logic depends upon the (logical) necessity of logical thought.
And we realize that no reason can be given. Logic cannot prove itself to be a priori. The whole debate must therefore stop at this point. The only justification that Wittgenstein can give for maintaining this view is to say 'Well, this is how things appear to me.' Yet he does more than this. He appeals to us and claims that if we understand our everyday language then we must see the inevitability of elementary propositions. What is more we must assent to his thesis that 'logical form' - the structure of reality - does show itself. But if we decide to be sceptical, and insist that we are neither aware of this so-called logical form being displayed in our language, nor are aware of any need for elementary propositions which cannot be formulated, then there is no further argument which Wittgenstein can produce to show that these things must be so. All he can say is that the sceptic cannot see the world aright; he does not really understand the propositions he is uttering. The sceptic would be trying to raise doubts where no questions can be asked (6.51), and this would not worry Wittgenstein. He realized that many would not understand the *Tractatus* but was not concerned about this. The purpose of the book would be achieved "if it gave pleasure to one person who read and understood it." 1/ If this is so then we can ask: 

17 *Tract.* Author's Preface p.3
it? It seems he must be someone "who has himself already
had the thoughts that are expressed in it- or at least
similar thoughts." 18

And for the rest? It does not matter. For those who
share Wittgenstein's faith the book is understandable and
acceptable. For those who have not yet been converted it
will present only problems and misunderstandings. The
concept of logic - the metaphysical basis of the book can
only be accepted a priori. And yet the author himself is
faced with a paradoxical problem at the end of the book -
namely, what to do with the propositions it contains. On
their own condition they are meaningless. Thus Wittgenstein
admits they are so - yet retracts none of them: they must
be used as a ladder to climb up to what is beyond. Once
these propositions have been transcended, one can see the
world aright. The Tractatus is therefore unique. it expresses
the inexpressible, and yet does so in order that in future
only the expressible will be expressed. it begins with a
theory about reality, constructs a system based on this
theory, and eventually rejects all the propositions used to
express this system as nonsensical. And there is still no
hint from the author that he might be mistaken. Indeed
Wittgenstein claims "The truth of the thoughts that are
here set forth seems to me unassailable and definitive." 19
There is nothing more to be said.

18 Author's Preface p.3
19 ibid p.5
This fascinating and profound work has greatly influenced western philosophy since its publication. It marked a turning point in British philosophy, and gave an impetus to the positivism which was being formulated in Vienna and Berlin. G.E. Moore had reacted earlier, and so had Bertrand Russell, but the consistency of Wittgenstein's tight system, and the amazing way in which he appeared to dissolve all philosophical problems strikes one as particularly outstanding. It marked a sweeping away of the wild speculation of the later nineteenth century, and a turn towards a desire for greater clarity and a distrust of metaphysical verbiage. And this is good. But the greatest fault then of the Tractatus was its own metaphysical standpoint, which could not meet its own criterion for meaningfulness.

So, the greatest fault of the Vienna Circle was that, whilst they rejected the metaphysical nature of the work they misunderstood many of the points which Wittgenstein made, and took it instead largely as a treatise on positivism. With their anti-metaphysical fervour they believed that though Wittgenstein said his work was nonsensical, they could nevertheless formulate a principle to rid philosophy of metaphysics— a principle which rules out the possibility of its own expression— and still maintained that their work had sense. They lacked both Wittgenstein's consistency, and his philosophical honesty. When we turn to Schlick's article we shall notice especially the former. But whether he succeeded in doing what he claimed we shall now discover.
CHAPTER II
THE POSITIVIST CONCEPT OF MEANING.

In this chapter I shall be discussing the concept of meaning in the Logical Positivists, as exemplified by Schlick's article "Meaning and Verification". But first I would like to examine briefly the background and historical setting of the Logical Positivist movement, and to indicate the influence of the Tractatus and the divergence from it. Then it will be possible to fit Schlick's article into this framework, and understand it better in the context of its philosophical setting.

The Vienna Circle

The Vienna Circle came into existence during the third decade of this century, when Moritz Schlick became professor of Philosophy at the University of Vienna. He had come into philosophy from physics, and was thoroughly imbued with the scientific way of thinking. The Circle had far reaching implications in that not only did it contain many leading philosophers among its members (e.g. Schlick, Carnap, Feigl, Waismann, Kraft, etc.) but it was composed too of sociologists, economists, mathematicians and physicists (e.g. Hans Hahn, Philipp Frank, Menger, Gödel).

20 In Philosophical Review Vol. 45, 1936 pp. 339-365. All references to this article will be given in the body of the text. Paragraphs will be identified by 'i', 'ii', etc.
All members had some first hand experience in some field of science. For several years it was not an organised movement, but remained a group of philosophers united by their common interest in, and similar approach to certain problems. Carnap says about their approach:

We tried to avoid the terms of traditional philosophy and to use instead those of logic, maths and empirical science - or of that part of the ordinary language, which, though more vague, still is in principle translatable into a scientific language.  

The formal organization of the Circle was not until 1928, and in the following year the 'manifesto' - "Wissenschaftliche Weltauffassung - Der Wiener Kreis" was published. This gave a brief account of the general philosophical position and principle aims of the group. The aims were to provide a secure foundation for the sciences and to demonstrate the meaninglessness of all metaphysics. Popper argues that the anti-metaphysical fanaticism of the Logical Positivists did in fact spoil much of their scientific thinking. This zeal which Ayer later calls "the missionary spirit of the Circle" led to the organization of international congresses and such publications as Erkenntnis, and the International Encyclopaedia of Unified Science. The whole idea of a unified science expressed in the language of physics which was propogated by Carnap and Neurath was constantly attacked by Popper. He himself was never a member of the Circle, and would not appropriate the label 'positivist'. However, even as late as 1963 Carnap was still maintaining

21 Philosophy of Rudolf Carnap ed. Schilipp, p. 21
that Popper exaggerated their philosophical differences.

Wittgenstein also, was never himself a member of the Circle, but he was in close contact with several of its leading members; particularly with Carnap, Schlick and Waismann. Carnap describes these earlier meetings which took place shortly after he himself had joined the Circle in 1926. There was no normal kind of discussion: Wittgenstein talked and the others listened — and only when elucidations were absolutely necessary would they cautiously ask him to explain things further. In 1928 Wittgenstein insisted that he no longer wished Carnap to be present, and the meetings continued with only Schlick and Waismann. Schlick however, was very influenced by Wittgenstein — both personally and philosophically.

The Vienna Circle formed an 'alliance' with the Warsaw group, the Polish logicians and philosophers, of whom Tarski immediately comes to mind. There were also very close affiliations with Reichenbach's Berlin Circle. The movement grew enormously in strength throughout the 30s, A.J. Ayer began attending the meetings in 1933, and the tradition had spread to Britain and the United States. But the Viennese Circle itself was disintegrating. Carnap accepted a chair at the University of Prague in 1931, and Hahn died in 1934, two years before Schlick was murdered by a student whose thesis he had apparently failed. 23 Although the members of the

23 This incident has often earned Schlick the title of "Second martyr for philosophy" next to Socrates. Although the German government did not itself execute Schlick, it nevertheless was very lenient towards his assassin, and very hostile in its obituarics, almost implying, as Ayer puts it: "that Logical Positivists deserved to be murdered by their pupils."
Circle, with the exception of Neurath, had not been noticeably active in politics, they provoked Nazi suspicion because of their critical and scientific temper and most of them were forced into exile. The Berlin Circle faced similar opposition, and the Warsaw group disintegrated because of the war. Neurath was now in Holland, and attempted to continue the movement, but he died not many years later and the Circle as such ended. However, Logical Positivism as a whole continued to exert an influence for many more years. Even today it is not unfair to say that the general scientific outlook is highly positivistic.

Although the Vienna Circle had ceased, the Logical Positivist movement had gripped much of the United States and Europe. Carnap lectured in America, along with Tarski, Quine, Goodman, Gödel and Hempel. He was not however very happy about the position there, particularly in Chicago. 24 In England the movement was represented by Ayer and Waismann, but over the last decade or more Positivism in Britain has given way to linguistic analysis, largely because of the influence of Wittgenstein's later work—Philosophical Investigations. The work of Wisdom and Austin has also further stimulated this approach. The initial claim is much the same as that made by the positivist: that no philosophy is being pursued any longer, but only analysis. This is carried further than by the Positivists however. We see now that the metaphysician is no longer a

24 See his autobiography pp41-3
criminal, but a patient, with the philosopher as his therapist. The contemporary slogan is "The meaning is the use" and language games and categories are all part of this new method. A philosophical problem has the form "I don't know my way about" and "the results of philosophy are the uncovering of one another piece of plain nonsense and of bumps that the understanding has got by running its head up against the limits of language." Nothing is hidden any longer, and if it is hidden, then it is of no interest to us.

But for nearly a quarter of a century Logical Positivism made its presence strongly felt. In "The Vienna Circle - Its Scientific Outlook" the authors set out a list of whom they regarded as their main precursors. These came to a formidable list, but it was only with a few aspects of the works of these men that the Circle alligned itself. The logical, scientific, empiricistic, or positivistic attitudes of these philosophers was approved, but the metaphysics in each case was rejected. Carnap even distinguishes between the position of the Circle and the older Positivism, and says: "It is important to realize that our doctrine has nothing whatever to do with the theses of the Reality or Unreality of anything whatever."  

25 Wittgenstein Philosophical Investigations Sect 123  
26 Investigations Sect. 119 (Blackwell 2nd edit. translated by Miss Anscombe.)  
We see here that though Carnap acknowledges the indebtedness of the Vienna Circle to some aspects of previous philosophy he nevertheless claims that they are making a very significant break with the past. What is the precise nature of this uniqueness they claim? It is that they do not practise philosophy. "We are not a philosophical school...we put forward no philosophical theses whatever." 28 Philosophy must be purged of all metaphysical and unscientific elements; the psychological questions and all other questions belonging to the empirical sciences must also be removed and placed in their proper domains. Then apart from the questions of the individual sciences all that remains in the realm of meaningfulness are the questions of the 'logical analysis' of science: analyzing its sentences, terms, concepts, etc. In this way "the logic of science takes the place of the inextricable tangle of problems which is known as philosophy." 29 This then is the claim: that the Vienna Circle is putting forward no doctrines, but is pursuing the only genuine task of philosophy, which is 'logical analysis'.

The question is raised now, how far is this a departure from the Tractatus? In what ways do the aims and outlook of the Positivists differ from those of Wittgenstein? The Tractatus was read out and discussed

28 Carnap
29 Carnap Logical Syntax of Language Chap V p.279
sentence by sentence in the meetings of the Vienna Circle, but it would seem that the Positivists had already thought out the basis of their position, and it was into this already accepted schema that Wittgenstein's work was read. Carnap admits that they learnt much from their discussions of the hook and accepted many views, but he also adds "as far as we could assimilate them to our basic conceptions." And it might seem that this was in fact further than they could be assimilated. Because the Tractatus was read into a positivistic framework Wittgenstein's sensitivity towards the Mystical was ignored. Carnap writes that "traditional theology is a remnant of earlier times, and entirely out of line with the scientific way of thinking in the present century." Schlick too held this view, that religion belonged to the childhood phase of humanity and would slowly disappear in the course of cultural development. But Schlick and Wittgenstein agreed that the doctrines of religion in their various forms had no theoretical content, but Wittgenstein did not then attribute them to the 'childhood phase'. He had a 'feeling' for the Mystical. We cannot think or speak about it; it is 'meaningless' because it goes beyond language and beyond the world. (Tract. 6.432-6.45) And yet the Mystical is nonetheless important. At one point Wittgenstein associates it with "feeling the world as a limited whole" (6.45) He says "We feel that even when all possible scientific questions have been answered,

30 Carnap's autobiography. Phil. of Rudolf Carnap p.24
31 autobiog. p.8
the problems of life remain untouched."(6.52) as if the problems of life are quite remote and distinct from any possible scientific questions. But then he adds: "Of course there are then no questions left, and this itself is the answer." And yet we sense that it is not the answer. But all the questions have been asked, all the answers have been given; we have travelled to the limit of logical thought, of language, of the world. And here we must stop. Indeed, there is no further to go... yet, there are things which cannot be put into words. "They make themselves manifest. They are what is mystical" (6.522)

This 'feeling' for the mystical is no part of Positivism. On this point Wittgenstein seems to have been thoroughly misunderstood. Indeed, Carnap admits:

Earlier when we were reading Wittgenstein's book in the Circle I had erroneously believed that his attitude towards metaphysics was similar to ours. I had not paid sufficient attention to the statements in his book about the mystical, because his feelings and thoughts in this area were too divergent from mine.32

It would seem that there was an equally big divergence between the aims of the Positivists and Wittgenstein. For the Positivists, maths and empirical science were taken to represent knowledge at its best, whereas Wittgenstein betrays a much less enthusiastic attitude towards this scientific outlook. The anti-metaphysical drive of the Positivists was lacking in him. True, he came to the same conclusions as the Positivists, that metaphysical statements are without cognitive content, but he did so reluctantly and painf...
"as if he were compelled to admit a weakness in a beloved
person." How influential then was the Tractatus once the
metaphysical basis was rejected? I think the answer lies
in Carnap's statements as to the most important insight he
gained from the Tractatus: "The conception that the truth
of logical statements is based only on their logical structure
and on the meaning of their terms." A second important
insight was the realization that metaphysical statements
are devoid of cognitive content, and that many of them
originate in a misuse of language and a violation of logic.
And so the criterion of meaning, if we can attribute this
to Wittgenstein, was retained and developed by the Circle.
We shall see as we examine Schlick's article that the notion
of contradictions and tautologies, the analytic-synthetic
dichotomy (begun by Hume and Kant, but given more precise
formulation in Wittgenstein) and the emphasis upon reducible
statements were all adopted from the Tractatus.

One final point must now be made. All these notions
adopted from the Tractatus (the 'criterion of meaning; the
meaningless of metaphysics, the truth-functions of
propositions) were based upon a very definite metaphysical
theory: the theory of elementary propositions picturing
atomic facts composed of simple objects. And this was based
on an even deeper and more a priori theory that logic pervades
the world. In selecting the teachings of which they could
make use, Schlick and the Positivists have withdrawn them
from the Tractatus schema, and deprived them of their context.

33 Ibid. p. 27 34 Ibid. p. 25
They neglected to see then that these conclusions came about simply as a result of a metaphysical position. In the next section of this chapter I hope that this will become more evident.

Schlick, "Meaning and Verification"

Having briefly outlined the rise and development of the Vienna Circle, indicated its main doctrines, and the difference in outlook between most of its members and Wittgenstein, I would like to turn to examine a particular example of a positivistic thesis, on the concept of meaning. In this article Schlick both gives a summary of his own position, and answers the criticisms levelled against Positivism by Professor C.I. Lewis. Schlick's indebtedness to the Tractatus is apparent in this article, as well as his divergence from the Tractatus position. After his initial remarks about meaning and propositions he himself actually claims:

If the preceding remarks about meaning are as correct as I am convinced they are, this will to a large measure be due to conversations with Wittgenstein which have greatly influenced my own views on these matters. I can hardly exaggerate my indebtedness to this philosopher. (p.341)

In this chapter I therefore propose to examine Schlick's own position, and the answers he provides to some of Professor Lewis's objections, and then to raise some other objections which might also be raised. In doing this I hope to uncover again, as in Wittgenstein, the fundamental assumptions which Schlick is making in order to arrive at
these conclusions. I think we shall find a great similarity in the concept of meaning of each of these philosophers, and yet at the same time there are very definite differences. I have indicated already what these might be, and as we now examine Schlick's article we may perhaps be able to see them more clearly.

The title of the article suggests that Schlick's concept of meaning is bound up with the idea of verification. And from the opening paragraph is is obvious too that 'meaning' concerns language and in particular propositions. But it is important first, as it was with Wittgenstein, to examine what Schlick means by a proposition. Initially it must be distinguished from a sentence: from a "series of words which we are unable to handle", "a mere sequel of sounds or a mere row of marks on paper." (p.33yiii) This differentiation between a sentence and a proposition overcomes the first difficulty concerned with meaning. For he wants to maintain both that it is "the very nature and purpose of every proposition to express its own meaning" and also that we can legitimately ask for the meaning of a statement which we do not understand. So by calling this latter statement (which is as yet"simply a complex of signs without meaning") a sentence this difficulty is solved. Now we can ask for the meaning of the sentence, and for an answer we are given the proposition which the sentence expresses, or the "logical rules which will make a proposition
out of the sentence, i.e. will tell exactly in what circumstances the sentence is to be used." (p340i) Either of these methods transform the sentence into a proposition within a definite language, and therefore give it a meaning:

the first method represents the simplest kind of ordinary 'translation'; the second one affords a deeper insight into the nature of meaning, and will have to be used in order to overcome philosophical difficulties connected with the understanding of sentences.

Although Schlick does not actually state what are these 'philosophical difficulties' he does indicate their source, namely the mis-handling of our words. His argument is that any word can only be properly understood, i.e. can only have a meaning, within a definite context already agreed upon. In any new context new rules must be provided. So it is quite mistaken to think that we know the meaning of a sentence simply because we are familiar with the words occurring in it. Before we speak or write at all we need to agree upon a definite logical grammar to constitute the significance of our terms. New rules must be applied if a word occurring in a new context is to have meaning. These rules can however be applied arbitrarily, and Schlick illustrates this by the example of his friend's nonsensical wish. His friend asks to be taken to a country where the sky is three times as blue as it is in England. This request has no meaning because 'blue' is being used in a way not provided for by the existent rules. But if Schlick's friend defines what he means by 'three times as blue' in terms of
the serenity of the sky, then the wish becomes meaningful to Schlick. From this it follows that if we ask for the meaning of a sentence we are asking for the circumstances in which it can be used, for conditions under which it will be true, and under which it will be false. So

Stating the meaning of a sentence amounts to stating the rules according to which the sentence is to be used, and this is the same as stating the way it can be verified (or falsified). The meaning of a proposition is the method of its verification. (p.341iiii)

It is necessary now to ask for the nature of these rules. Schlick tells us that they consist of ordinary definitions, and 'ostensive' definitions, the simplest form of which is a pointing gesture accompanying the word. But usually of course the procedure is more complicated as very many words cannot be ostensively defined. However, Schlick recognises that for any definition to be comprehensible we must understand the explaining words beforehand, and here he claims that there is no way of understanding any meaning without final recourse to ostensive definitions, adding: "and this means in an obvious sense, reference to 'experience' or 'possibility of verification'" (p.342 ii) He denies that he is expounding a theory about meaning, but insists that this is the criterion of common sense and scientific procedure. He claims in fact that this criterion of meaning has always been employed in the past, using an example from Einstein to support his point:

This then is Schlick's own position which he states in the first section of his article, and which he acknowledges
as "the basis of the whole philosophy of what has been called the 'logical positivism of the Viennese Circle'" (p.343ii).

This basis is referred to by Professor Lewis as the 'empirical-meaning requirement' and is criticised as inadequate because it limits 'significant philosophic discussion'.

Schlick now takes Lewis's objections and attempts to answer them one by one with arguments derived from his statements in the first section. Lewis claims that the empirical-meaning requirement demands that any concept or proposition shall be intelligible not only verbally and logically but in the further sense that one can specify those empirical items which would determine the applicability of the concept or constitute the verification of the proposition. 35

Schlick denies that there is any justification for the words 'but in the further sense'. Quite the opposite: Positivism asserts that the 'verbal and logical understanding' of a proposition means knowing how it could be verified. In other words that "knowledge of how a proposition is verified is not anything over and above its verbal and logical understanding but is identical with it." (p.344i)

Professor Lewis requests an explanation of the significance of the phrases 'methods of testing' and 'verifiability', and Schlick thus sets out to define these. He quickly dismisses one of Lewis's chief objections, the 'here and now predicament' by pointing out that when the

35 C. Lewis "Experience and meaning" Philosophical Review, March 1934. p.125
Positivist say that a proposition has meaning only if it is verifiable, they do not mean if it is verified. Not actual verification, but the possibility of verification is the criterion of meaningfulness. He takes this further by examining a statement by Lewis:

Suppose it maintained that no issue is meaningful unless it can be put to the test of decisive verification. And no verification can take place except in the immediate present experience of the subject. Then nothing can be meant except what is actually present in the experience in which that meaning is entertained. 36

Here he claims that Lewis's conclusion follows from neither the first nor the second premiss. It does not follow from the first because this is maintaining that no issue is meaningful unless it can be verified. So it is false to conclude from that verification must take place in the present, for the premiss implies that verification need not take place at all. As for the second premiss, this has no meaning. Verifying an act, according to Schlick, is like reeling bored, and it is ridiculous to say that one can only feel bored in the present moment. So it is not verification now which gives a sentence meaning, nor is it actual verification at all. It is possibility of verification. So, with statements about future events the method of verification would be waiting for the events to happen. It is quite false to say that such statements assert only the present existence of certain expectations.

36 "Experience and meaning" p.131
Verifiability, then, means possibility of verification. But to say this is not enough, for we have not yet defined what is meant by 'possibility'. Schlick now distinguishes between 'empirical' and 'logical' possibility, and shows that only the latter is involved in verification. Empirical possibility is to mean 'compatibility with natural laws', (p. 347) but here we are not told how we arrive at these 'natural laws', or what status they have. We are told that we cannot have complete knowledge of them, although it is assumed that we can have some knowledge of them. Schlick demonstrates how we can talk of the degrees of (empirical) possibility. He asks "Is it possible for me to lift this book? Surely! - This table? I think so! - This billiard table? I don't think so! - This automobile? Certainly not!" (p. 348) From this we see that judgements about empirical possibility are based on past experience, and are often uncertain with no sharp boundary between possibility and impossibility. Therefore this cannot be the possibility relevant to meaning. The empirical circumstances are important to know if the proposition is true, but not if it has meaning. Otherwise no sharp or final decision could ever be obtained: "Might not future efforts disclose a meaning which/ were unable to find before?" But Schlick's whole argument is that meaning is not inherent in a sentence, waiting to be discovered, but must be bestowed upon it by applying the rules of logical grammar. It is necessary to
have already agreed upon these rules, and to understand them. Otherwise the persons speaking are not communicating at all. They are not uttering any propositions, and so "there is nothing they could try to verify, because you can't verify or falsify a mere row of words." This is to show that it cannot be empirical possibility which is relevant to meaning: verifiability is necessary before the empirical circumstances can be considered.

Our investigation is not yet over. We still need to know what it is for a fact to be 'logically possible', since 'verifiability' means 'logical possibility of verification'. Or, to put it more accurately, what it is for something to be a 'fact'. Schlick says "I call a fact or process 'logically possible' if it can be described, i.e., if the sentence which is supposed to describe it obeys the rules of grammar we have stipulated for our language."(p.349111) This, as Schlick realizes, does not make very good sense: for if a fact could not be described, or if it was not logically possible, it would not be a fact at all according to the Vienna Circle. Therefore when Schlick appeals to us by saying "But I think my meaning will be understood." this is of course illegitimate. He has argued strongly that 'meaning' is not "a kind of entity inherent in a sentence and hidden in it like a nut in its shell", yet here he admits that the sentence he has used does not mean what he wants it to mean. So it might seem that here at least he does think 'meaning' is
Schlick now brings forward several examples of statements representing logical impossibilities. Two of them are: "My friend died the day after tomorrow." and "The lady wore a dark red dress which was bright green". These sentences are meaningless because the rule governing the use of the words in the sentence is violated. And this is what logical impossibility means: "a discrepancy between the definitions of our terms and the way in which we use them".

It is therefore very important to distinguish between this approach and the view which sees logical principles as laws governing the psychological process of thinking. Schlick believes the latter to be entirely mistaken, and claims that the criterion for meaning is not our ability to think about or imagine a situation. A sentence is meaningless simply because the rules of our language have not provided for the words in it to be used in such a way. Now Schlick says we could change these rules, and allow the use of 'both red and green', arranging a meaning for them. So the onus is on us.

The result of our considerations is this: Verifiability, which is the sufficient and necessary condition of meaning, is a possibility of the logical order; it is created by constructing the sentence in accordance with the rules by which its terms are defined. The only case in which verification is (logically) impossible is the case where you have made it impossible by not setting any rules for its verification. Grammatical rules are not found anywhere in nature, but are made by man and are, in principle, arbitrary; so you cannot give meaning to a sentence by discovering a method of verifying it, but only by stipulating how it shall be done. Thus logical possibility or impossibility of verification is always self-imposed. If we utter a sentence without meaning it is always our own fault. (p 3511)
This then is a summary of Schlick's whole position, and we see how far he has moved from the Tractatus. Propositions have no inherent meaning: logical rules are not laid down in the very nature of reality - but we impose meaning, we decide upon the logical rules. This is a great weakening of Wittgenstein's position, and we experience a dissatisfaction about the arbitrariness with which a proposition can have meaning or no meaning, depending upon whether we allow it.

However, we are concerned at the moment with understanding what Schlick says, not with criticisms of his position. This criterion for the meaningfulness of assertions applies also to questions. Of the questions we cannot answer, some might be meaningful and some nonsensical. The impossibility of finding an answer may be empirical or logical: if it is empirical, then there is always hope for future generations, for with better facilities, stronger mental powers the problem might be solved. In any case it could not be said to be impossible. But if it is logically impossible to find an answer, such problems would always remain insoluble. For the question itself would not be genuine and it would be "a mere row of words with a question mark at the end". (p. 352)

How do we know then whether a question is meaningful, i.e. whether or not it is logically possible to find an answer? Schlick says that we know a question is meaningful if we can understand it - "if we are able to decide for any given proposition whether, if true, it would be an answer to our question." If the question is genuine, an answer is always
logically possible. If no answer can be given, then nothing was being asked! The dividing line between logical possibility and impossibility is sharp and distinct. In the case of empirical possibility there was a gradual transition from what was possible to what was impossible. But there is no gradual transition between meaning and nonsense. Meaning is entirely independent of the 'laws of nature', whereas empirical possibility is determined by these. For this reason Schlick says the proposition 'Rivers flow uphill' is meaningful, but false, because it contradicts the laws of nature.

The author foresees the possible objection that if meaning is a matter of experience, how can it be a matter of definition and logic? Yet he insists that there is no contradiction here.

The possibility of verification does not rest on any 'experiential truth', on a law of nature or any other true general proposition, but is determined solely by our definitions — by the rules which have been fixed for our language, or which we can fix arbitrarily at any moment. (p.353)

Now, claims Schlick, all these rules ultimately point to ostensive definitions, and through these verifiability is linked to experience. The rules of language are rules of the application of language, so there must be something to which it can be applied. Thus, expressibility and verifiability are one: "Not only can the logician be an empiricist at the same time; he must be one if he wants to
understand what he himself is doing." (p.353)

In the next section Schlick takes specific examples to illustrate the points he has been making. He considers the case of the reality of the other side of the moon, and says the question: 'What is the other side of the moon like?' could be answered by a description of what could be seen or touched by a person located somewhere behind the moon. Just as it is still meaningful to say 'Rivers run uphill' - although it contradicts the laws of nature, it is also meaningful to talk about the other side of the moon even if it were shown that an actual examination was impossible. How would we verify statements about the other side of the moon? First of all Schlick suggests that the meaning-requirement would be fulfilled if we were able to "imagine (picture mentally) situations which would verify our proposition" (p.355i) But he also cautions against accepting the 'psychological explanation of verifiability'. The thoughts we entertain, or the imaginations we form have no relevance for verification, as it was said earlier.

The question of meaning has nothing to do with the psychological questions as to the mental processes of which an act of thought may consist. (p.355i1)

These sentiments are echoed by Carnap:

What gives theoretical meaning to a proposition is not attendant images or thoughts, but the possibility of deducing from it perceptive propositions, in other words, the possibility of verification. 37

37 Carnap Philosophy and Logical Syntax p.14
Schlick then seems to be maintaining here:

a) In some cases (although we do not really know the criterion for deciding which cases) 'imaginability' serves as a sufficient basis for verification.

b) We nevertheless do not need to be able to imagine a situation in order to verify a proposition. In other words, 'imaginability' is a sort of 'optional extra'.

In the last section Schlick claimed that verifiability was linked to experience through ostensive definitions. In the example here, he says that a proposition about the other side of the moon would be a proposition about physical substance being at a certain place. So this would have meaning if we indicated the circumstances under which a proposition of the form 'this place is filled with matter' would be true or false. But, he continues, it is easy to see how such a proposition about physical properties and spatial relations is connected with 'sense-data' (i.e. 'experience') by ostensive definitions. Yet he claims:

This connection...is not such as to entitle us to say that physical substance is 'a mere construction put upon sense-data', or that a physical body is 'a complex of sense-data'—unless we interpret these phrases as rather inadequate abbreviations of the assertion that all propositions containing the term 'physical body' require for their verification the presence of sense-data. And this is certainly an exceedingly trivial statement. (p. 354ii)

But I feel that there are many important points to be raised in connection with all this, which I shall bring up later.
Although he tells us here what this connection is not, he fails to say what the connection is. And in fact it would seem that no other possibilities are open.

The final example I want to discuss is the verification of the 'immortality thesis'. Professor Lewis claims that we can certainly understand what would verify the hypothesis of life after death. And Schlick agrees, provided we regard it as an empirical hypothesis possessing logical verifiability and not as a metaphysical problem.

As with the verification of any future statements, Schlick suggests the 'waiting' method: "It could be verified by following the prescription: 'Wait until you die!'" (p.356iii)

Professor Schlick's powers of procrastination are surpassed only by his powers of imagination, for he claims he can easily imagine seeing the funeral of his own body, and continuing to exist without a body. Professor Lewis thinks that waiting until he dies is scientifically unsatisfactory: "It could hardly be verified by science; there is no observation or experiment which science could make, the negative result of which would disprove it." 38 It might certainly appear that such a method is incapable of general proof, and would apply only to the experiencing person himself. But Schlick disagrees and would find it easy to describe experiences such that the hypothesis of an invisible existence of human beings after their bodily death would be the most acceptable explanation of the phenomena observed." (p. 357i)

38 "Experience and meaning" p. 143.
It would be necessary to define such terms as 'supercelestial space' in such a way that the impossibility of reaching it or perceiving anything in it would be merely empirical, and not logical. So the conclusion stands:

The hypothesis of immortality is an empirical statement which owes its meaning to its verifiability, and has no meaning beyond the possibility of verification. (p. 357ii)

But we can see now that the 'possibility of verification' has acquired such a breadth as to make the verification criterion almost redundant. True, Schlick is still talking about 'experience', but we can see that this is no longer 'experience' in the sense of perceiving the given. It is definitely 'experience + induction', and if we were to investigate this further we should realize that all 'experience' involved in verification is experience + induction. And the latter cannot be 'logically' justified.

However, this is Schlick's position concerning meaning. Meaning is essentially bound up with 'verifiability', which is the 'logical possibility of verification'. Unlike the teaching of the Tractatus we ourselves impose logical possibility on the world, through the rules which we formulate for the use of language. This seems to indicate that Schlick might well become involved in a solipsist position, but in a later section of his article he maintains that this is not so. The 'self' is not a basic property of experience, but is itself a fact of experience. Thus, he claims, 'experience' which is stressed so much in Positivism, does not in its
original, primitive form belong to anyone. It is absolutely neutral; immediate data "have no owner". (p. 359ii) In this way he hopes to avoid the accusation that the reduction of all propositions to 'protocol statements', or all experience to 'sense-data', and all definitions to 'ostensive definitions' involves him in the ego-centric predicament.

But it is time to examine in more detail the statements which Schlick makes concerning his position, and to unearth the presuppositions forming the basis of his article. First of all we cannot take too seriously the claim that there is no theory involved in this article; that this is really only a "simple statement of the way in which meaning is actually assigned to propositions, both in everyday life and science." (p. 342) It seems almost unnecessary to point out that in fact this is a theory, founded upon a very definite hypothesis about the nature of meaning. Another immediate problem which strikes us concerns the nature of the verification criterion. Schlick asserts "The meaning of a proposition is the method of its verification." and his reader exhibits the usual signs which denote puzzlement. For what does this mean? Is Schlick identifying the 'meaning' with the 'method'? It seems so. But because it is correct for Schlick to say that stating the meaning of a proposition amounts to stating the way in which it can be verified, it does not follow that the meaning is equivalent to the method, or that the meaning
means the method. For example, if I ask - how do I know the
meaning of the sentence 'It is raining outside'? - then it
would be in order to give in reply, rules for the use of this
sentence: viz. it means that if I go to the window now I
shall see raindrops falling, or if I go outside without my
raincoat and umbrella I shall get wet. But to equate the
meaning of the sentence 'It is raining outside' with the
method of verifying it, i.e. going to the window and looking
out, or going into the street and getting wet, is obvious
nonsense. The meaning is not my standing out in the rain
and getting wet. And Schlick of course could not have
intended to mean this, but merely that to give the meaning
of a sentence would be to give the rules for its use.
But there are real difficulties apart from this. For if what
Schlick intends the criterion to state is true, then it is
self-applicable. And one must ask then, what is the meaning
of that sentence. What would be the method of verifying such
an assertion? Is it really a meaningful statement, or does
it fall into the same category which Wittgenstein claimed
for the statements of the Tractatus? It seems difficult to
know how Schlick could avoid this: how he could say that this
assertion was any more than "a complex of signs without
meaning".

This is probably the most fundamental difficulty with
any criterion of meaning, and certainly applies in the case of
Logical Positivism. Yet this is by no means the only problem.
There are problems too involved with the idea of 'reduction' and one other real and fundamental difficulty concerns the whole notion of defining a word. One can appeal to the idea of an 'ostensive definition' as if this resolves all philosophical difficulties; as if once we get down to pointing to \( x \) then all our problems disappear in a flash. But, apart from the fact that very many words cannot be ostensively defined, before we can use ostensive definition at all the whole learning process has been presupposed.

If I ask "What is 'red'?" and in order to ostensively define what 'red' means you point to the mail-box and say 'That is red.' - what help is this to me? How am I to know that what you are referring to is the colour and not the shape of the mail-box? (Though, of course, I would not know what 'colour' or 'shape' meant unless these had already been defined.) In order to clarify me further you might point to a red car and say 'Well, that is red'. I would probably notice now that the shape and size of the car were quite different from those of the mail-box, but it could occur to me that when I ran my fingers over the top of the mail-box and the car, I felt a similar sort of resistent hard metal. So perhaps 'red' is the name for the touch of this hard metal? Now you point to a book which a man is carrying and say 'Look, that is red'. I watch the man post a letter in the mail-box, climb in the car and drive away - and I deduce that 'red' somehow denotes the property of being used by the man. In cooeration you point to your wallet and insist "But that
is red!" Ah, now I see it: the wallet contains money, the mail-box contains letters, the book contains words, and pages, and the car contains people — so 'red' means 'a container'.

Of course it would take someone of incredible stupidity not to have guessed by now that the 'red' being referred to, designated the colour of these objects. Nevertheless, in order to understand a word through ostensive definition, one would already have to understand the words 'mail-box', 'car', 'wallet', 'book', 'shape', 'size', 'colour' — and a thousand others. There is really no such thing as a 'pure' ostensive definition. In order to define 'a' by pointing out 'b', 'c', 'd' etc. — one needs first to have defined 'b', 'c', 'd', in terms of 'e', 'f', 'g', and so on. Eventually we shall just have a heap of undefined words, which are in fact ostensively indefinable, except by reference to each other. Wittgenstein expresses this argument in one short phrase in the *Investigations*: "How do I know that this colour is red? It would be an answer to say 'I have learnt English'. And how does one learn English — or any other language? By 'ostensive definitions'? Hardly. It seems that ostensive definitions are only possible after the language has been learnt. And then they are no longer needed, for we have already discovered what 'red' means.

So it is simply not true to say that all definitions ultimately resolve themselves in ostensive definitions. If, in
order to define 'hippopotamus' you point to that animal over there, this is no help to me unless I know that 'hippopotamus' refers to that animal over there, and not to its colour, or its shape, or the size of its mouth; that is, unless I have already learnt the word 'hippopotamus'. And then, what is now the purpose in pointing it out to me? How in fact we do learn a language is however a very big question, and one which certainly cannot be shrugged off so lightly. But I feel for the reasons that I have stated that the appeal to 'ostensive definitions' is not entirely satisfactory.

Another issue which I feel presents problems for the idea of verification is Schlick's constant urge to 'wait'. This Pickwickean appeal is inadequate for several reasons. 'Waiting' might be a legitimate method for the verification of such propositions as 'the sun will rise tomorrow'; we know how to verify it - by waiting until tomorrow morning. But when we are dealing with hypotheses there are more difficulties. On the Positivist criterion such hypotheses as 'If 2+2=4 tomorrow, I shall go out' present no trouble, for the phrase 2+2=4 adds nothing to the meaning of the proposition. It is the same as saying 'I shall go out tomorrow'. Now, 'if the sun rises tomorrow I shall go out' apparently has more difficulties, for although it is practically certain that the sun will rise tomorrow, it is not 'logically necessary' in the way that '2+2=4' is held to be 'logically necessary'. But consider 'If the sun shines tomorrow I shall go out'. There is no certainty here. So if the sun shines tomorrow, and I go out
it will be true, and if I stay indoors it will be false. Now, 'to verify' a proposition means 'to state the conditions under which it can be true or false'. So if the sun does not shine I have no means of knowing whether 'If the sun shines tomorrow I shall go out' will be true or false. Which means I have no means of verifying it, unless one claims that it can be verified by examining my 'intention' when I utter the statement.

But Schlick explicitly denies that a proposition about the future asserts only the present expectations of a person. And in any case the only way to verify an 'intention' on the behaviouristic schema of the Positivists would be by watching my actions following the assertion; and if the sun does not shine, my actions are irrelevant. So a strange paradox occurs. The statement 'If the sun shines tomorrow I shall go out' has meaning in one context (if the sun shines tomorrow), but no meaning in another (if the sun does not shine) yet it is the same sentence and purports to express the same proposition. So the statement at the same is both meaningful, and non-meaningful.

What then is to be done about these hypotheses? Are we to say they form a special category which lies outside the verification criterion? Problems about 'waiting' arise too with any undated statement about the future. When I say 'The sun will rise tomorrow.' I am making this statement today - August 10th, and predicting an event concerning tomorrow - Aug 11th. And here, waiting until the morning is my method of verifying it according to Schlick. But if I simply say 'The
sun will rise every morning', then this is not one specific future event which we can verify by 'waiting', for no amount of waiting will yield us a final conclusion. I should have to wait until the end of the world when the sun had risen for the last time, and the last morning had ended. Then I would say that the statement had meaning, and was in fact false, for the sun had now ceased to rise. But then it might be objected that the last morning had also ended so the statement was true, as if the concept of 'morning' somehow involved the concept of the rising of the sun. So the statement: 'The sun will rise every morning' would now become necessarily true, analytic.

This opens up two questions which I shall discuss in relation to Wittgenstein. The one following directly on from the above contrasts the idea of meaning and truth being dependent upon our arbitrarily stipulated rules (as in Schlick) with the idea of meaning being inherent in propositions because they picture reality (as of course in Wittgenstein). The other question concerns the problem of 'reduction'. Here we see a correspondence between Wittgenstein's thesis that all propositions are truth-functions of elementary propositions, Carnap's thesis that all significant statements are reducible to protocol statements, and Schlick's contention that statements about physical objects are connected with sense-data through ostensive definitions. We will take this latter problem first.
As we saw, Wittgenstein's reasons for maintaining the view that all propositions were truth-functions or elementary propositions were definitely 'metaphysical'. To have a meaning it was necessary for a proposition to picture a fact. Atomic facts were composed of simple objects making up the substance of the world, and these objects were represented by the 'names' in an elementary proposition. So the very notion of meaning hinged upon the Picture Theory, and upon the idea of the elementary propositions. So from this it logically follows that if any proposition is to have meaning it must be reducible to elementary propositions. But with Carnap and Schlick the position seems to be different. For them the protocol statement, or the ostensive definition does not 'picture' any 'atomic fact'. It is not the final product of logical inference. It is rather the ultimate expression of the immediately given experience. This reminds one much more of Russell's theory of 'particulars' than Wittgenstein's doctrine of simple objects. Protocol statements are important for Carnap because they assert my immediate experience: 'joy now', 'red circle there' etc., and so primitive protocols are unmistakably true; they need no verification. Neurath objects to this conclusion, but the important point here is that protocols and extensive definitions are concerned with experience, and in this they differ from Wittgenstein's elementary propositions. Let us now examine, then, the position as stated in Schlick's article.
The claim in brief is that propositions are linked to sense-data by ostensive definitions. But we are not told exactly what a 'sense-datum' is. Is he using it to refer to 'the given' - i.e. the object or complex, or part of object, which I see in front of me, or is he using it in the sense of an intermediary 'between' me and the object? The so-called problem of perception is much involved in this theory. The question is asked: when I see a goldfish in a blue light, what do I see? It appears to be a green goldfish. But I know that under normal conditions (which need to be specified) the goldfish is gold. So I say I am having green sensations, or that I am perceiving green 'sense-data'. In the same way, when I look up at the moon during the first quarter I see something far different from the astronaut out in space. Yet we are both seeing the same object, but, it is claimed, we are both sensing different sense-data. So these metaphysical entities are postulated to fill the gap between the object and my perception. And a host of problems inevitably follow. Do sense-data really exist - what ontological status have they? How long do they last? Do we ever perceive actual objects? What happens to the 'external world'? Do sense-data have any properties? And - are they private? These problems have all been investigated, and it is not the purpose of this thesis to discuss them further - but simply to point out that until he clarifies what sense-data are, Schlick's contention that 'assertions about physical properties and spatial relations are connected with
sense-data by ostensive definitions" hold little significance for us. Yet let us try to consider the claim he is making.

We might make a statement: "The black animal standing in that dirty water is a hippopotamus." This is an assertion about physical properties - the black hippopotamus, and the dirty water - and about spatial relationships - i.e. the black hippopotamus being in the dirty water. This can be reduced to a so-called 'ostensive' definition - "black hippo there" - which still shows this relationship, but which we can imagine accompanying a gesture of the hand. But accepting that we have just ostensively defined "black hippo" (which we have not, according to the earlier argument) we can still ask how this connects the assertion about physical properties and spatial relations with sense-data. For "black hippo" is not a sense datum, but still a physical object. Now if I say "Black there" this might well be accepted as a sense-data statement - a 'protocol' statement. But we have left the hippopotamus far behind. How do we move from a sense-datum expression to an assertion about physical properties, except by saying that "a physical body is a complex of sense-data" which Schlick expressly denies he is saying? He insists there is a connection, which is not such as to entitle us to say that physical substance is a mere construction put upon sense-data. But he fails to say then what this connection is. Indeed, there seems to be little else which it can be.
So we see the difficulties involved with this sort of reduction-hypothesis. But when we turn to the final problem which I propose to investigate we shall see perhaps yet more how weakened the position is by the move away from the tight system of the Tractatus. As I indicated, this problem is tied up with the notion of rules, and verification, and logical possibility. It was very striking that the meaning of a proposition had suddenly become dependent upon our rules and definitions. A statement could be false, but yet if we wished to redefine the terms within it, then it could become true. This is obvious. But we went further than that. A sentence could be meaningless, and yet if we redefined the terms within it, then it could have meaning. Meaning depends upon the logical possibility of verification, which as we remember "is determined solely by our definitions - by the rules which have been fixed for our language, or which we can fix arbitrarily at any moment." (p. 353) This arbitrariness is expressed by Neurath:

> When a new sentence is presented to us we compare it with the system at our disposal and determine whether or not it conflicts with that system. If the sentence does conflict with the system, we may discard it as useless (or false) as e.g. would be done with 'In Africa lions sing only in major scales'. One may on the other hand accept the sentence and so change the system that it remains consistent even after the adjunct of the new sentence. The sentence... would then be called true.

But we need not stop here. Not only can our revision of rules change a false statement into a true one, but it can also transform a nonsensical utterance into a significant proposition. 

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Now this must surely play havoc with the whole notion of verification. The dividing line between logical possibility and impossibility is not so sharp and distinct as we had imagined. For we can move this line as we please by agreeing upon a new set of rules. Earlier Schlick had said that a question which is now empirically impossible to answer always left hope for following generations, but one which was logically impossible to answer would remain insoluble under all imaginable circumstances would confront us with a definite hopeless Ignorabilis. But can this be maintained alongside the thesis that we stipulate the rules for meaning, and logical possibility is determined solely by our definitions? It would hardly seem so. The positivists seem to want the tightness of Wittgenstein's position, without having to pay the cost that comes with it - the ladder paradox. As it is, they seem to have none of the completeness which the Tractatus gives, and none of the interwoveness and satisfaction which comes with this position, and yet they still are in difficulties about the status of their own statements.

Much of the conclusion to this thesis has already been stated or indicated. Nevertheless, I propose to spend a few more paragraphs in uncovering the presuppositions of Logical Positivism, as exemplified by Schlick's article, drawing a final comparison with Wittgenstein, and attempting to give some evaluation of the position as a whole.
CONCLUSION

Now start again from the beginning since you have missed the mark this time. Socrates' questioner's advice could be applied so often in the history of philosophy. In fact one wonders if the mark is ever hit. And yet, what mark are we talking about? What mark are philosophers trying to hit? What is philosophy all about? Is it really an analysis of language? What happened to the pursuer of truth, the lover of wisdom, the system-builder?

The answer to these questions is not to be found in this thesis, I am afraid. My task is to examine the concept of meaning in Wittgenstein and Schlick; but insofar as they throw any light on these problems we can see what possible answers might be offered. What mark was Wittgenstein trying to hit? His aim in the *Tractatus* is to set a limit to the expression of thought, to what can be said; and this he surely succeeds in doing. His other aim is to show why the problems of philosophy are posed, namely, because the logic of our language is misunderstood. And if we accept the system of the *Tractatus* we will have to admit that he succeeds here too. And yet it is important to see how Wittgenstein reaches his mark. For he does so by building upon a number of theories.

41 Plato:
about reality, all of which find their root in his one, all-embracing, all-limiting, all-conditioning concept of logic. This theory of logic he held firmly, and if we may say so, dogmatically, throughout the Tractatus. It was his great a priori commitment upon which his system was built. The Picture Theory of Meaning must be understood in the context of Wittgenstein's concept of logic, as must the doctrine of 'showing forth'. In fact without this basis the philosophy of the Tractatus would be pointless.

But what of Schlick's article? Did he reach his mark?

Let us remind ourselves again of the aims of the Vienna Circle. They were to establish a sound foundation for science, and to demonstrate the meaninglessness of all metaphysics. And the immediate way of going about these tasks was by attempting to formulate a criterion of meaning. But can we honestly say that Schlick achieved what he set out to do?

We may claim that there were three fundamental assumptions running through "Meaning and Verification". One is referred to by Quine as one of the "dogmas of empiricism" : viz. the logical-empirical, analytic-synthetic dichotomy. This dichotomy can be traced back to Hume and Kant and is found too of course in Wittgenstein. The next assumption is closely bound up with this - the primacy of the 'logical'. Logical possibility becomes the precondition for empirical possibility : situations are dismissed as 'merely
empirically impossible', meaning that they are not impossible 'in principle' and therefore not impossible at all. Analytic truth is absolutely necessary truth, whereas empirical truth is only probable: 'synthetic' statements can be true or false. But I feel that this distinction between the 'logical' and the 'empirical', and the pre-eminence given to the 'logical' is not satisfactory. The border line between them is not so definite as the Positivists would have us believe. 'Analyticity' eventually comes to mean that we decide to define a word in this way...... For example, 'Rivers run uphill' is according to Schlick a meaningful proposition which is neither analytic, nor self-contradictory, but false. However, we stipulate the rules for its use, we give the terms definition, so we can define a 'river' to mean 'a copious stream of water flowing downwards to lake, marsh or sea'. So now the statement 'Rivers flow downhill' is no longer imparting any information, for if we know what it is for x to be a river, we understand that x flows downhill. This statement is now analytic, logically true. So 'Rivers flow uphill' is no longer simply false but contradictory, for the concept 'flowing downhill' is contained in the concept of 'river'. And when Schlick now says it is logically possible for a river to flow uphill he is wrong. This position is rather absurd, but I feel it is bound to result when the notion of logical possibility is bound up with the notion of grammatical rules, and then the claim made that we ourselves
stipulate these rules arbitrarily.

I said there were three basic assumptions of Schlick's article. The third concerns the nature of meaning and the nature of propositions. Only propositions have sense; only of propositions can it be said that they have meaning. Thus it is meaningless to talk about the 'meaning' of life, or the 'meaning' of youth, or the 'meaning' of happiness. 'Meaning' is then a term applicable in the strict sense to propositions alone. Pilate's question would have received a sharp answer from the Positivists. 'Truth' is simply 'true propositions'. What else could it be?

These assumptions are in fact the assumptions of modern empiricism, and the reasons for holding them are — and can only be — metaphysical. Popper shows in his article on the demarcation between science and philosophy, that the notions which go along with the verificationist criterion of meaning can only be held on a priori grounds. He challenges the whole idea of a criterion of meaning, and sees any such criterion as spurious. His thesis is that while metaphysics certainly is not science, it need not be meaningless, and his attempt at showing this meets, I feel, with great success. Popper's criticism of the verifiability principle in brief is that "It did not exclude obvious metaphysical statements, but it did exclude the most important and interesting of all scientific statements, that is to say, the scientific theories, the universal laws of nature."
So has Schlick reached his mark? Has the criterion of meaning succeeded in establishing a sound basis for the sciences, and ridding philosophy of metaphysics? Let us look again at the two positions of Wittgenstein and Schlick. Schlick and the Vienna Circle claimed to take their notion of verifiability from Wittgenstein. And we saw that in fact this was abstracted from the rest of Wittgenstein's metaphysics. The criterion was taken over, held a priori, and wielded enthusiastically against unsuspecting metaphysicians and non-positivistic scientists. Wittgenstein came to the conclusion that metaphysical statements were nonsensical, as a result of accepting the idea that logic pervades the world, that logical form is the connecting element between language and reality, and that elementary propositions must picture atomic facts. But the Vienna Circle...? They rejected the metaphysical basis, but accepted the conclusion! It is like looking at an argument, rejecting the premisses, but holding the result.

'All Frenchmen are interesting'
'Some Frenchmen are handsome'
'Some handsome men are interesting.'

Here the Logical Positivists would be accepting the conclusion, but rejecting the premisses. This of course is permissable, but then another argument must be established for the conclusion. And the Positivists fail to do this. But what is more, they claim to take from Wittgenstein the conclusion. This would be like saying I am taking the conclusion of the
above syllogism. But if I am rejecting the premisses, how can I say this? I am not taking the conclusion at all—and if I do not establish any other argument, I am not taking any conclusion at all: I am simply making a dogmatic assertion that 'Some handsome men are interesting'. Of course if someone asks me to prove it I can say - 'Well, look at Joe, he's handsome, and I talked to him yesterday and he's very interesting.' If someone then pointed out that this was because 'Joe' was a Frenchman, it might prove more than the conclusion, it might substantiate perhaps one of the premisses. However, assuming that 'Joe' is not a Frenchman, I would still have given a reason for making my statement. But if I said - 'What do you mean "prove it"? I'm not saying anything which has to be proved. This is just common knowledge'—then one might feel dissatisfied, and wonder if I can really give a reason, particularly if one happens to be of a different opinion oneself. But Schlick is going yet further than this. For the verification criterion is not something which is simply held a priori—it is still more than that. It is a principle which aims to establish a criterion by which we can judge the meaningfulness of language. And finally it therefore rules out the possibility of its own formulation.

Can we honestly say that Schlick has succeeded in doing even what he himself set out to do? Really I think we cannot. I feel that the whole concept of meaning in the Vienna Circle was the fruit of an anti-metaphysical bias
which was clung to passionately, even though it eliminated too a large part of science. In that they diverged from the position of the *Tractatus* they left behind the tightness of the system; in that they accepted some of the *Tractatus* teachings, they are subject to the same criticisms as Wittgenstein made of his own statements - that they were nonsensical. And in either case, the *a priori* character of both arting points must be accepted on faith.

Therefore I feel that Popper must be given the final word when he says of the Positivists:

> The anti-metaphysical bias is a kind of philosophical (or metaphysical) prejudice which prevented the system builders from carrying out their work properly. 42

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42 Popper "The demarcation between Science and Metaphysics" *The Philosophy of Rudolf Carnap* edit. Schilpp, p.214
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These were books used or referred to in the body of the text. For a much more comprehensive bibliography of the works on Logical Positivism I would refer you to the Bibliography compiled by Ayer in the collected essays on Logical Positivism. This list also includes works which are expository or critical of every form of modern analytical philosophy - see pp. 381-446 Logical Positivism.