

IS THERE A SYNTHETIC A PRIORI?

1. *Introduction.* A survey of the literature on the problem of the synthetic *a priori* soon reveals that the term 'analytic' is used in a narrower and a broader sense. In the narrower sense, a proposition is analytic if it is either a *truth of logic* or is *logically true*. By saying of a proposition that it is logically true, I mean, roughly, and with an eye on the problem of the relation of logical categories to natural languages, that when defined terms are replaced by their definitia, it becomes a substitution instance of a truth of logic. And a truth of logic can be adequately characterized for present purposes as a proposition which occurs in the body of *Principia Mathematica*, or which would properly occur in a *vermehrte und verbesserte Auflage* of this already monumental work. If we now agree to extend the convenient phrase 'logically true' to cover truths of logic as well as propositions which are logically true in the sense just defined, we can say that an analytic proposition in the narrower sense is a proposition which is logically true.

On the other hand, we find many philosophers using the term 'analytic' in the sense of *true by virtue of the meanings of the terms involved*. These philosophers seem, for the most part, to be under the impression that this sense of 'analytic' coincides with that defined above. And if 'p is logically true' did entail and were entailed by 'p is true by virtue of its terms', little damage would result from this ambiguity. Unfortunately, this is not the case, as will be argued in a later section of this chapter. Indeed, the more interesting examples given by these philosophers of propositions which are analytic in their sense turn out on examination *not* to be logically true. From which it follows that unless they are mistaken in applying their own criteria, 'analytic' in their sense cannot be logically equivalent to 'analytic' in the sense defined above. That *true by virtue of the mean-*

ings of the terms involved is indeed a broader sense of 'analytic' than *logically true*—broader in that it has a greater denotation—will be a central theme of this chapter.

To avoid possible misunderstanding, let me make it clear that I shall use the term 'analytic' only in the first or narrower of the two senses distinguished above, and that where I want to refer to the views of philosophers who use the term in the broader sense, I shall make the appropriate translation of 'analytic' into 'true by virtue of the meanings involved'. Accordingly, 'synthetic' will be used to mean *neither logically true nor logically false*, and the question under discussion becomes: Are there propositions which are *a priori* yet not logically true?

To answer this question even provisionally, we must decide on a meaning for '*a priori*'. Here the going is more difficult, and we shall have to be content with a rather schematic discussion. By and large philosophers have given (or have believed themselves to give) four different but closely related senses to this phrase. In the first place we have Kant's joint criteria of universality and necessity. The propositions traditionally characterized as *a priori*, with the possible exception of the proposition 'God exists' (in the context of the ontological argument) have been universal propositions—*a priori* knowledge about individuals presupposing a minor premise of subsumption. Now when he explicates the criterion of universality, Kant makes it clear that it is intended to exclude such universal judgements as are true merely as a matter of fact, so that universality merges with the criterion of necessity. If our knowledge that all A is B is to be *a priori*, it must be correct to say 'All A *must* be B'.

But while we should all agree that a person cannot properly be said to know *a priori* that all A is B unless he can also be said to know that all A is *necessarily* B—so that knowing that all A is necessarily B is a *necessary condition* of knowing *a priori* that all A is B—it does not, at least at first sight, seem to be a sufficient condition. There is no immediate appearance of contradiction in the statement, 'It is highly probable that all A is necessarily B', so that there would seem to be no absurdity in speaking of knowing *a posteriori* that all A *must* be B, though just what account might be given of such knowledge is another, and extremely perplexing, matter to which we shall return at the conclusion of our argument.

This brings us to the second of the four interpretations of apriority. According to this approach, we have *a priori* knowledge that all A is B, when we *know for certain* that all A is B. If we ask what is meant by 'knowing for certain', we are told that this is not a mere matter of feeling confident that all A is B. It must be *reasonable* to assert 'All A is B' where this reasonableness is not grounded on knowledge that

on such and such evidence *e* is probable that all A is B, nor on an argument of which one of the premises is of this form. Furthermore, not only must it be reasonable to assert 'All A is B' but it must in some sense be asserted *because* it is reasonable. In traditional terminology, *knowing for certain* is contrasted with both *probable opinion* and *taking for granted*.

This second approach leads smoothly and easily into the third and fourth explications of apriority. The third arises by scarcely more than a minor reformulation of what we have just said. For to say that the reasonableness of asserting 'All A is B' does not rest on knowledge of the form 'It is probable on *e* that all X is Y' is but a pedantic way of saying that the reasonableness of asserting 'All A is B' does not rest on, or is independent of, experience. And according to the third approach, our knowledge that all A is B is *a priori*, if it is *independent of experience*.

But if the reasonableness of asserting 'All A is B' does not rest on experience, on what does it rest? The answer to this question brings us to the fourth approach. This reasonableness, we are told, rests solely on a correct understanding of the meanings of the terms involved. In short, *a priori* truth is truth *ex vi terminorum*.

Now, in sketching these familiar explications of *a priori* knowledge—namely as knowledge of the necessary, as certain knowledge of universal truths, as knowledge independent of experience, and as knowledge *ex vi terminorum*—I have made it clear that to my way of thinking there is a general confluence of these four criteria, such that each, on reflection, leads to the others. Much more would have to be done before we could claim to have disentangled the various meanings which have traditionally been given to the term '*a priori*', and we shall have to return to this topic before this chapter is complete. But schematic though the above discussion may be, it provides a useful background for a provisional choice of a sense of this term for the interpretation of the question: Is there a synthetic *a priori*? Accordingly, I shall select the fourth of the above criteria as the defining property of the *a priori*. Our question thus becomes, 'Are there any universal propositions which, though they are not logically true, are true by virtue of the meanings of their terms?'

2. *A Divergent Usage; C. I. Lewis*. It will prove useful to contrast our provisional explication of the original question with what one gets if one adopts the conventions implicit in C. I. Lewis's use of the terms 'synthetic' and '*a priori*'. Since he appears to use 'analytic' as we are using '*a priori*' and '*a priori*' to mean *holding of all possible objects of experience*, in his hands the question 'Is there a synthetic *a priori*?' becomes 'Are there any universal propositions which, though they are not true by virtue of the meaning of their terms, hold

of all possible objects of experience?' To *this* question Lewis answers 'no'. That he is correct in doing so becomes clear once it is realized that Lewis picks his meanings for both 'analytic' and '*a priori*' from our list of four traditional criteria of *a priori* knowledge. In other words, if we are justified in speaking of a confluence of these criteria, and given Lewis's interpretation of the terms 'synthetic' and '*a priori*', he is on solid ground in claiming that it is *logically impossible* that there be any propositions which are both synthetic and *a priori*.

On the other hand, it can be argued that to *our* question Lewis gives an affirmative answer, since he can be shown to accept as analytic in his sense (true *ex vi terminorum*) certain propositions which do not seem to be logically true. I am not convinced, however, that Lewis intends to adopt this position.

3. *Linguistic Rules and Ordinary Usage*. I shall open the next stage of my argument by pointing out that the phrase 'true by virtue of the meaning of its terms' can reasonably be said to have the same sense as 'true by definition'.¹ This brings us face to face with a sticky issue. Human knowledge is presumably the sort of thing that finds its fitting expression in the *ordinary usage* of expressions in *natural languages*. Have we not therefore reached a point at which the horsehair couch is a more appropriate instrument of philosophical clarification than the neat dichotomies and tidy rule-books of the professional logicians? I do not think so. Not, however, because I frown on philosophical therapeutics (on the contrary!), but because it seems to me that the successes achieved in recent decades by putting ordinary language on the couch were made possible by the brilliant use of tools developed in *Principia Mathematica*; and I believe that recent logical theory has developed new tools which have not yet been put to adequate use in the exploration of philosophical perplexities.

Now I submit that the logician's concepts of *formation rule*, *transformation rule*, and *rule permitting the substitution of one expression for another*, have legitimate application to natural languages. By this I mean not that it is possible for the logician to construct such rules for natural languages, but rather that rules of these types are embedded in natural languages themselves without any help from the logician. That the vague, fluctuating, and ambiguous character of ordinary usage extends to these rules is, indeed, granted. But does not the same hold true with respect to the logician's concept of a sentence? Or of a predicate? Yet we do not hesitate to discuss natural languages in these terms. I see no reason in the Heracleitean character

¹ 'Definition' is here used in a deliberately broad sense so that later it can be construed to cover both 'explicit' and 'implicit' definition. It is, I take it, clear that not all analytic truths are true by explicit definition. It should be equally clear that not all statements which are true by implicit definition are synthetic.

of ordinary usage to reject what would seem to be the obvious implication of the fact that natural languages can be illuminated by confronting them with artificial languages obeying explicitly formulated rules of transformation and synonymy.

Indeed, can we make sense of critical appraisals of linguistic phenomena as *correct* or *incorrect* by persons uncorrupted by scrutiny of esoteric rule-books, without supposing that linguistic rules are embedded in ordinary usage? And the fact that rustics playing a game handed down for generations without benefit of Hoyle would be hard put to it to formulate a set of rules for the game, is surely not incompatible with the idea that when they play the game they do what they do *because of* the very rules they would find it so difficult to formulate! One wonders when philosophers will finally abandon the fiction that rules exist only in public utterance of phonemes or displays of printers' ink.

It is also worth noting that partisans of ordinary usage do not always make clear just what they intend as the opposite of ordinary usage. Sometimes it seems to be extra-ordinary usage; at other times the fictitious or imaginary usage of artificial languages invented by professors of logic. Extra-ordinary usage is, after all, actual usage, and is, presumably, in most respects, the same sort of thing as ordinary usage. And if it should be the usage of highly articulate and intelligent people, we might well expect to find it clarifying. On the other hand, it is reasonable to doubt the philosophical value of utterances made by fictitious users of unused calculi. Ordinary usage in the sense of *actual* usage contains the language of science. Even the logician cannot talk about artificial languages without actually using language, and if he can not only criticize his own usage, but formulate the very rules he has violated, we have an example of syntactical rules in *actual*, and therefore, in an important sense, *ordinary* usage.

4. *Explicit and Implicit Definition.* The purpose of the preceding section has been to restore some semblance of plausibility to the notion that the concepts *analytic* and *true by definition* can usefully be applied to natural languages. If we have succeeded, we have shown that in the sense in which ordinary usage contains predicates, it may also be said to contain propositions which are analytic and true *ex vi terminorum*, and which can therefore be said to formulate analytic *a priori* knowledge. But a synthetic *a priori* proposition, on our account, is one that is both synthetic and true *ex vi terminorum*. Can there be such a thing?

Now it is at once clear that the 'definition', if such it can be called, by virtue of which a synthetic *a priori* proposition would be true *ex vi terminorum* cannot be *explicit* definition; for the *a priori* truth to which these give rise is analytic. If anything that has been called

definition can serve this purpose, it is what, following Schlick, we shall call *implicit* definition—to an examination of which we now turn.

In rough-and-ready terms, a number of predicates without explicit definition are said to be implicitly defined if they appear in a set of logically synthetic general propositions which are specified as axioms or primitive sentences by the rules of the language to which they belong. To say that these propositions are axioms or primitive sentences is to say that they are specified to be *unconditionally assertable* by syntactical rules of the language. This account is deliberately skeletal, and is intended to gain flesh from the argument which follows shortly.

If we use the familiar illustration of a geometry, the following points may be noted: (1) Neither the axioms nor the theorems are logically analytic, though the implicative proposition whose antecedent is the conjunction of the axioms, and whose consequent is one of the theorems is logically analytic. (2) If the geometry should be of the Euclidean type, then the theorem 'The area of a triangle is $\frac{1}{2}bh$ ', which is logically synthetic, must not be confused with the proposition 'The area of a *Euclidean* triangle is $\frac{1}{2}bh$ ', which is indeed an analytic proposition, but one which presupposes both the theorem, and an explicit definition of 'Euclidean triangle' in terms which specify that an object does not belong to this category unless the axioms and therefore all their logical consequences hold of it.¹ Similarly, the axiom 'A straight line is the shortest distance between two points', which is logically synthetic, must not be confused with 'A *Euclidean* straight line is the shortest distance between two points', which, though analytic, depends on an explicit definition of 'Euclidean straight line'.

(3) The non-logical terms of an uninterpreted calculus should not be interpreted as variables. The interpretation of such a calculus by establishing translation rules correlating its non-logical terms with expressions in actual use must not be confused with the assigning of values to variables. (4) The postulates of a Euclidean geometry do not constitute an implicit definition of its non-logical terms unless they are specified as unconditionally assertable (and hence as more than generalized material implications, equivalences, etc.) by the syntactical rules of the calculus. (5) A deductive system can gain application

¹ Unless I am much mistaken, C. I. Lewis thinks of his 'categorial principles' as unquestionably analytic, because he thinks of them as analogous to 'The area of a *Euclidean* triangle is $\frac{1}{2}bh$.' Now, if he intends this analogy, then his categorial principles are indeed logically true. But then, if the above discussion is sound, must there not be a corresponding set of propositions which are *not* logically true, and which contain a set of predicates which are not explicitly defined in terms of these propositions? predicates which correspond to 'triangle' as occurring in Euclidean axioms, rather than to 'Euclidean triangle'?

either by (a) translating its non-logical terms into expressions in actual use, or (b) by building it on to language in actual use by establishing rules of inference to take one from sentences in the calculus to sentences in actual use (and vice versa); or by a combination of (a) and (b).

The most useful way of developing this skeletal account of implicit definition is to confront it with some frequently raised objections. Perhaps the most common complaint is that a set of terms may be 'implicitly defined' in the above manner and yet have no 'real' or extra-linguistic meaning.¹ 'Implicit definition', it is pointed out, is a purely syntactical affair, and to expect it to give rise to extra-linguistic meaning is as sensible as expecting a number of people to lift each other by their boot-straps.

That this objection calls attention to an essential feature of meaningful language, a feature which is not accounted for by implicit definition conceived as above, is doubtlessly true. But its force as an argument against the definitional character of implicit definition is somewhat less keenly felt when one realizes that when explicit definition is conceived in purely syntactical terms, exactly the same objection can be raised against it. Both explicit and implicit definition are matters of syntax. The difference is that whereas in the case of explicit definition the definiendum and the definienda are distinct, and the 'giving extra-linguistic meanings'—however this is done—to the definienda fixes the extra-linguistic meaning of the definiendum; in the case of implicit definition the extra-linguistic meaning must be 'given' to all the predicates 'simultaneously', as they are all both definienda and definienda rolled into one.

A second objection points out that a set of predicates may be implicitly defined in terms of one another and yet admit a multiplicity of real meanings. But, as before, the same is true of an explicitly defined term and its definienda. To the set consisting of 'man', 'rational', and 'animal' could belong either the real meanings *man*, *rational*, and *animal*, or the real meanings *brother*, *male*, and *sibling*. It may be granted that to the extent that the definienda themselves are explicitly defined in terms of other predicates, and the definienda of these in turn, and so on, the alternative real meanings capable of belonging to the terms in the chain are increasingly

¹ Let me make it clear from the beginning that my willingness to use the phrase 'real or extra-linguistic meaning' in building up the dialectical structure of my argument does not reflect an acceptance on my part of a Platonic or Meinongian metaphysics of meaning. My purpose in this paper is to explore the controversy over the synthetic *a priori* sympathetically and from within, in the conviction that the truth of the matter lies separated from itself in the opposing camps. Some light will be thrown on the status of 'real meanings' by the discussion of "... means - -" in section 8 below.

restricted. But it is by no means obvious that the terms in however long a definition chain could not possess any one of a number of sets of real meanings. In any event, to the fact that the syntactical structure of a chain of explicit definitions limits the number of alternative real meanings which can be possessed by the predicates in the chain, corresponds the fact that the number of possible 'interpretations' of a set of implicitly defined terms can frequently be narrowed by adding a new axiom to the original set. In neither case would the utility of the definition seem to depend on its admitting only one set of real meanings. The purposes of unambiguous communication require only that where one and the same abstract syntactical structure is associated with two different sets of extra-linguistic meanings, this structure be embodied in two sets of visually and audibly different symbols—one for each 'interpretation'.

But the above is but prelude to the most searching of the objections to the notion of implicit definition. The objection is based on broad philosophical considerations, and takes us to the heart of our problem. Its point of departure is the above familiar distinction between the 'linguistic meanings' of an implicitly defined set of predicates, and the 'real meanings', the properties and relations, which are correlated with these predicates. As its first step it reminds us that what the implicit definition does is specify that certain sentences containing these predicates are unconditionally assertable. In other words, that we are authorized by the rules of the language to assert these sentences without either deriving them from other sentences, or establishing probability relations between them and observation sentences. But, the objection continues, even though the implicit definition may permit us unconditionally to assert certain sentences involving the predicates 'A', 'B', 'C', etc., the *truth* of what we assert depends solely on the relation of the *real* meanings of these predicates to the world. Thus, even should there be a syntactical rule (implicit definition) authorizing us to assert 'All A is B' unconditionally (and therefore to derive 'x is B' from 'x is A') might there not be an object which conforms to the real meaning of 'A' without conforming to the real meaning of 'B'? If this were the case, then as far as its real meaning was concerned, 'All A is B' would be false, even though the rules of the language blandly authorized us to assert it. There would be a tension between what was authorized by the *linguistic* meanings of 'A' and 'B', and what was appropriate to their *real* meanings. On the other hand, the objection continues, no such contretemps can arise in the case of explicit definition, for it is not logically possible that something conforms to the real meaning of 'C' and yet not to the real meaning of 'D' where 'C' is explicitly defined in terms of 'D'.

To this the objection adds that even though *as a matter of fact* all

items which conform to the real meaning of 'A' did conform to the real meaning of 'B', we could nevertheless *conceive* of objects conforming to the real meaning of 'A' but not to that of 'B'. If, therefore, we were to adopt a syntactical rule authorizing us to derive 'x is B' from 'x is A', we should be tailoring the verbal clothing of our thought to be shorter than its reach.

The objector grants that it might, in some circumstances, be sensible or convenient to adopt a language in which 'x is B' is syntactically derivable from 'x is A', even though something might *conceivably* exemplify the real meaning of 'A' without exemplifying the real meaning of 'B', provided that one were extremely confident on inductive grounds in the truth of the generalization, 'If anything exemplifies the real meaning of "A" then it exemplifies the real meaning of "B".' But, he continues, it just would not do to say that 'All A is B' is true by virtue of the meaning of its terms. Implicit definition, he concludes, is a pale imitation of explicit definition, for it lacks the power to yield statements which are true by definition.

5. *Implicit Definition; A Traditional Defence.* Now the above is only one prong of the attack on implicit definition. But before we develop the other prong, we must take into account the classic counter to this first offensive. For the defenders are ready with an equally venerable reply.

It will have been noticed that lurking in the premises of the above critique was the idea that even should it be true that everything which exemplified the real meaning of 'A' also exemplified the real meaning of 'B', it would be so *as a matter of fact*. So that it would be *conceivable* that something might conform to that of 'A' without conforming to that of 'B'. If pressed, the critics would give the following reason for this supposition. After all, they would say, since the statement 'All A is B' is admittedly *synthetic*, it must be *logically possible* and hence *possible* and hence *conceivable* that something might exemplify the real meaning of 'A' without exemplifying that of 'B'.

It is here that the defence, clothed in the dignity of *philosophia perennis*, quietly adds that for 'All A is B' to be synthetic yet true *ex vi terminorum*, it is not sufficient that 'x is B' be syntactically derivable from 'x is A'; there must also be an *extra-linguistic* or *real connection* between the real meaning of 'A' and the real meaning of 'B'. In other words, given real meanings for 'A', 'B', 'C', etc., an implicit definition of these predicates in terms of one another will be adequate only if to the syntactical derivations authorized by the definition, there correspond *synthetic necessary connections* between the properties which are the real meanings of these predicates. Indeed, the defence continues, it will be appropriate to give an implicit definition of these terms only to the extent that one *apprehends* these necessary connec-

tions. For only to this extent could we exclude, merely on the basis of what we mean by, say 'A' and 'B', the possibility that something might conform to the real meaning of 'A' but not to that of 'B'.

6. *Implicit Definition: The Attack Continued.* The opposition to implicit definition now develops the second prong of its offensive, focusing attention on the notion of real or synthetic necessary connection. It reveals itself to be an 'empiricist' opposition, claiming that this notion is incompatible with the most elementary principles of the empiricist tradition.

Historically, the characteristic doctrines of empiricism have been grounded in a theory, or better a type of theory, of concept formation. Theories of this type form a spectrum which at one end touches and is easily confused with a radically different approach (to be developed at the close of our argument) which can also with some justice claim the title 'empiricism', though it is committed to few if any of the dogmas associated with this term. Let us begin by reflecting on the consequences for our problem of a characteristic (if somewhat over-simplified) formulation of what we shall call *concept-empiricism*. It goes as follows: Concepts of qualities and relations are formed from particulars. We can, indeed, have concepts of qualities and relations of which we have encountered no instances; but only if these concepts 'consist' of concepts which have been formed from instances.

Now, from this theory, together with certain appropriate assumptions concerning the composition of concepts, it follows that we can have no concepts of universals which are not satisfied by particulars. 'Satisfied by particulars' here means 'would be satisfied by particulars if satisfied at all'. In this sense the property Centaur is satisfied by particulars, even though it actually has no instances.

The implication of concept empiricism with respect to the concept of real connection is immediate and murderous. There is no such concept. Yet here we must be careful. It is sometimes thought that when Hume and his followers are criticizing rationalistic discourse about necessary connections, their application of concept empiricism consists in pointing out that *they* find no instances of necessary connection among sensibly experienced particulars, and predict that we shall find none. If this were the heart of the matter, the obvious comeback would be, 'You are either looking in the wrong place, or are necessary-connection-blind.' The truth, of course, is that if there is such a thing as necessary connection, it is a relation satisfied by *universals* (a relation whose terms are universals), and *not* by particulars. Thus, for the concept empiricist, our failure to have such a concept is not a mere matter of failing to find any particulars which exemplify it; we could not find particulars which exemplify it.

It should be noted that unqualified concept empiricism equally entails that we have no concept of *logical* necessity, not to mention conjunction, disjunction, negation, and class-membership, though concept empiricists have not been quite as assiduous in pointing this out as they have been in scoffing at real connection. And even should the concept empiricist seek to define logical necessity in psychological terms, or, perhaps, give an emotivist analysis of such terms as 'necessary' and 'must', denying them cognitive meaning, he can scarcely treat such useful terms as 'and', 'or', 'not', and 'is a member of' in either of these ways. Sooner or later he is led to distinguish between two types of cognitively meaningful expression: (1) those which stand for concepts, e.g. 'red', and 'centaur', and (2) those which, while they do not stand for concepts, have a legitimate (and indeed indispensable) syntactical function in language.

But more of this later. For the moment it is sufficient to note that whatever else he may be committed to, the concept empiricist can have no truck with a relation of real connection between extralinguistic or real meanings. As a result, if he has any use at all for the phrase 'implicit definition', it can mean nothing more to him than the building of empirical generalizations of which we are highly confident into the very syntactical structure of our language. The concept empiricist is thus in a position to return to the first prong of the attack on the notion of implicit definition by insisting once again, this time on explicit empiricist grounds, that even should an 'implicit definition' authorize us to derive 'x is B' from 'x is A' at the linguistic level, it nevertheless cannot prevent us from conceiving of something which exemplifies the real meaning of 'A' without exemplifying that of 'B'.

7. *Concept Empiricism: The Conservative Approach.* The moral of the argument to date is that only if concept empiricism is rejected is it possible to hold that there are non-logically true propositions which are true *ex vi terminorum*.

There are many to whom this would be the end of the matter, as they find some version of concept empiricism to be beyond dispute. Indeed, there was a time, not too long ago, when I myself was a convinced concept empiricist—though I was not as aware of its implications and presuppositions as I should have been. For a number of years, however, I have been a renegade, and in the following pages I shall indicate some of the considerations which led me to abandon concept empiricism, as well as the resulting changes in my interpretation of the synthetic *a priori*.

In the preceding section it sufficed for our purposes to introduce concept empiricism by means of a studiously vague formulation. We must now call attention to the fact that the phrase denotes two

radically different lines of thought which agree, however, in concluding that the basic concepts in terms of which all genuine concepts are defined are concepts of qualities and relations exemplified by particulars in what is called 'the given' or 'immediate experience'.

In its more traditional and conservative form, concept empiricism distinguishes sharply between the intellectual awareness of qualities and relations, and the formulation of this awareness by the use of symbols. In short, it accepts without question a venerable but, at present, unfashionable distinction between thought and its expression in language (or, as it is sometimes put, between 'real thinking' and 'symbolic thinking'). Thus the concept empiricist of this brand conceives of such symbols as 'red' and 'between' as acquiring meaning by virtue of becoming associated with such abstract entities as redness and between-ness, the association being mediated by our awareness of these entities. His attention is thus focused on the question, 'How, and in what circumstances, do we become aware of abstract entities?'

Now it is characteristic of the concept empiricist to be convinced that an essential role in the process whereby we come to be aware of universals is played by particulars which exemplify these universals. In its more coherent form, the primary ground of this conviction seems to have been a metaphysical conviction to the effect that abstract entities exist only *in rebus*, that is, in particulars, so that only through particulars could mind enter into relations with them. This was usually coupled with the claim that our ability to be aware of even the most complex and recondite universal can be explained on the hypothesis that in the last analysis all awareness of universals is derived from the awareness of instances, together with a more or less crude attempt to fill in the psychological details.

In its classical form, concept empiricism can be dramatized as follows: A mind is about to learn the meaning of the word 'red'. The abstract entity in question is lurking in the manifold of sense. But so are many others. This one stands out clearly. Here! and here! No, that can't be it! Aha! a splendid specimen. By the methods of Mill! That must be what Mother calls 'red'!

No one, of course, would recognize a theory of his own in such an absurd picture. Empiricism is notoriously a tough-minded theory, whereas the above is soft-headed. Nevertheless, it is my conviction that although most philosophers who call themselves empiricists would reject it out of hand, they fail to appreciate the extent to which it is part and parcel of the empiricist inheritance, as well as the extent to which some of the most characteristic dogmas of empiricism are expressions of the hold it still has on the empiricist imagination.

This is not the occasion for a detailed discussion of this first main

type of concept empiricism. Our present concern is rather with its underlying presupposition of a distinction between the pure awareness of an abstract entity on the one hand, and the linguistic or, in general, symbolic expression of this pure awareness on the other. That I regard this distinction as a mistake will scarcely cause surprise. The proposal to abandon it has lost its revolutionary ring. Once a radical innovation, the notion that thought is a 'symbolic process' has become a commonplace, almost a truism. Unfortunately, as is the case with many contentions that have become truisms, its implications are no longer as passionately scrutinized as they were when it was new, and it is often combined with modes of theorizing with which it is radically incompatible. In view of the widespread acceptance of the thesis in question, there is little need to construct one more argument in its defence. Instead, I shall concern myself with certain of its implications which bear on the synthetic *a priori*.

Let us assume, then, that the situation which obtains when it is true to say that Jones is aware of a quality or relation or possibility or, even, a particular, can (in principle) be exhaustively described in terms of and dispositions relating to the use of linguistic symbols¹ (predicates, sentences, names, descriptions). Indeed, since the tidy, socially stabilized structures we call languages are continuous with more rudimentary conceptual mechanisms, let us assume that the above Jonesean situations can (in principle) be exhaustively described in terms of habits and dispositions relating to the use of symbols. Now, this assumption has an obvious implication of great importance for our problem. If what occurs when we are 'aware of a universal' is the use of a symbol, it follows that learning to use a symbol cannot be based on the awareness of universals. In other words, we are committed to the abandonment of what has happily been called the metaphor of the mental eye, which is so deeply rooted in the grand tradition of Western philosophy (and is one of the major points on which East Meets West) that its influence crops up where least expected.

If we put this implication in a slightly different way, we immediately establish contact with a characteristic contention of Professor Lewis. All classification of objects, however confident and pre-emptory, is a venture, a venture which at no point finds its justification in a pre-symbolic vision of generic and specific hearts on the sleeves of the objects of experience. Classification resembles the grasping tentacles of an octopus, now tentative, now confident, rather than a salesman's selection of a suit for a customer after a glance at

¹ It should not be assumed that in calling an event a *symbol* we are describing the event. We are rather serving notice that our discussion of the event will be in semantical terms.

his build. I am afraid, however, that our agreement with Lewis is more shadow than substance. For while he writes in this manner of the interpretation of the given by means of concepts whose implications transcend the given, he also holds that the sensible appearances of things *do* wear their hearts on their sleeves, and that we do have a cognitive vision of these hearts which is direct, unlearned, and incapable of error—though we may make a slip in the expressive language by which these insights are properly formulated. In other words, the assumption to which we are committed requires to extend to all classificatory consciousness whatever, the striking language in which Lewis describes our consciousness of objects.

8. *Concept Empiricism, Syntactics, Semantics, and Pragmatics.* We distinguished above between two radically different lines of thought which lead to the conclusions characteristic of concept empiricism. Of these we have taken a brief look at the first or mental eye variant. Before turning to the second, let me point out that although for analytical purposes we are drawing a sharp distinction between these two approaches, historically they have usually been blended into one confused argument.

The concept empiricism we are now defining arose *pari passu* with the development of association theories of learning in psychology, and has felt as much at home in more recent behaviouristic formulations as in the earlier (mentalistic) varieties of this psychological movement. In its traditional form, this second approach, although it agrees verbally with the more conservative form of concept empiricism that such words as 'red' acquire meaning by becoming associated with universals (though it tends to stress classes rather than qualities and relations), insists that this association develops by the joint occurrence in the mind of instances of the word and of the characteristic in question, in this case redness, unmediated by awareness of abstract entities. In other words, while it is redness that is associated with 'red', the mechanism whereby this association is created does not involve awareness of redness, but only the joint occurrence in experience of instances of redness with tokens of 'red'. In this respect it differs radically from the first approach, for which the formation of the association involves awareness of the universal. In short, the concept empiricism which develops in this context, if it does not entirely escape from the metaphor of the mental eye, at least does not include abstract entities within its visual field.

Now, if we do not limit ourselves to the account thus crudely sketched, but embrace in our view the more sophisticated theories of this general type, there is clearly *something* to them. A philosopher who rejects the mental eye approach and all its implications is indeed committed to the view that it is by the causal interplay of the

individual and his physical and social environment, without benefit of a prehension of eternal objects, whether *in re* or *extra rem*, that concepts, meaningful symbols, arise. However, while there is indeed *something* to theories of the above type, they are guilty of a radical confusion, and are in large part responsible for the more implausible features of contemporary empiricism.

Our first comment on the theory sketched above is a restatement and pressing of a point made earlier in this paper. It is simply that unqualified concept empiricism is patently incapable of accounting for many of our most familiar concepts, among others those of logic and mathematics. To remedy this defect, the theory is usually modified by introducing a radical dualism into its account of concepts and concept formation. The theory now recognizes a second mode of concept formation, namely the learning to use symbols in accordance with rules of logical syntax. The concepts of logic and mathematics are held to be symbols which gain meaning in this second way, rather than by association with empirical phenomena.

It is even more important to note than even those terms, such as 'red', which are supposed by the theory to gain meaning by association, share in the second mode of concept formation, for only by being used in accordance with rules of logical syntax can they perform the functions by virtue of which a concept is a concept.

Clearly, then, the learning to use symbols in accordance with rules is a pervasive feature of concept formation. Up until now the rules we have considered in this chapter have been *syntactical* rules, rules according to which assertable expressions are put together, and properly derived from one another. However, some proponents of the second approach to concept empiricism have been so impressed with the philosophical power of the concept of rule, that they have applied it to the association of a term with an extra-linguistic class of objects, which association, as we have seen, is the core of their theory. Thus we find them characterizing the learning to use a language or system of concepts as the learning to use symbols in accordance with two types of rule: (a) rules of syntax, relating symbols to other symbols; (b) semantical rules, whereby basic factual terms acquire extra-linguistic meaning. It takes but a moment, however, to show that this widespread manner of speaking involves a radical mistake. A rule is always a rule for *doing* something in some circumstance. Obeying a rule entails recognizing that a circumstance is one to which the rule applies. If there *were* such a thing as a semantical rule by the adoption of which a descriptive term acquires meaning, it would presumably be of the form 'Red objects are to be designated by the word "red".' But to recognize the circumstances in which this rule has application, one must already have the concept of red! Those

who speak in this sense¹ of semantical rules, therefore, are committed to the view that an awareness of abstract entities is a precondition of learning the intelligent use of symbols.

Now, once the concept empiricist acknowledges the force of these considerations, he is committed to a revision of his theory which, in effect, changes its whole spirit and orientation, and, indeed, deprives it of many of the philosophical implications which are so dear to traditional empiricism. But before developing this point let us briefly review the fundamentals of concept formation as they appear in this new perspective. The learning of a language or conceptual frame involves the following logically (but by no means chronologically) distinguishable phases:² (1) The acquisition of habits pertaining to the arranging of sounds and visible marks into patterns and sequences of patterns. The acquisition of these habits can be compared to the setting up that part of the wiring of a calculating machine which takes over once the 'problem' has been 'punched in'.³ (2) The acquisition of thing-word connections. This can be compared to the setting up of that part of the wiring of a calculating machine which permits the 'punching in of information'. These connections are a matter of being *conditioned* to respond to kinds of situation with kinds of verbal pattern, e.g. to respond to the presentation of a green object with 'This is green'; it is *not* a matter of 'learning to say "...'" when one observes that the situation is thus and so'. Observing that the situation is thus-and-so already involves the use of a conceptual frame.⁴

¹ I hasten to add that I am aiming this criticism at those uses of the phrase 'semantical rule' only which evoke this phrase, as above, to explain the acquisition of extra-linguistic meaning by linguistic expression. [Semantical rules as rules of *translation* into expression in our language which already have a use are not open to this criticism.]

² I leave out of account, as a topic too large to be introduced into this discussion, though of equal importance for the understanding of the nature of conceptual systems, the prescriptive or conduct guiding aspect of language. This topic will be discussed in Chapter 11.

³ Note that while the activation of these habits results in verbal behaviour which *conforms* to syntactical rules, it cannot be the *obeying* of syntactical rules unless the subject has learned the prescriptive syntactical metalanguage which permits the formulation of these rules. For an elaboration of this point, see Chapter 11.

⁴ Just as an intra-linguistic move is not in the full sense an *inference* unless the subject not only conforms to, but obeys, syntactical rules (though he may conceive them to be rules justifying the transition not from one *linguistic expression* to another, but from one *thought* to another); so a language entry transition is not in the full sense an *observation* unless the subject not only (in normal circumstances) tokens 'This object is green' if and only if a green object is present to his senses, but is able to infer (in a pragmatic metalanguage) from 'The thought *this object is green* occurred to Jones at time t in place s in circumstances c' to 'a green object was present to Jones's senses at t in s'.

Let us refer to these two dimensions of (descriptive) concept formation as the learning of *intra-linguistic moves* and *language entry transitions*.¹ Now, it might be thought that while a descriptive word like 'red' would not be a *word* unless it played the syntactical role of a predicate in intra-linguistic moves, its possession of empirical meaning, indeed the fact that it is the word it is, is constituted by its role as a conditioned response to red things. And, indeed, there is a certain plausibility to the idea that to say of the German word 'rot', for example, that it means *red*, is to say that this vocable is associated (by Germans) with red things. Certainly, if they did not (tend to) respond to red things with 'rot', it could not be true that this German word means *red*. But, as we shall see, to grant the latter point is by no means to concede the former.

Sentences of the form "'Rot' means red' have had no less a hypnotic and disastrous effect on empiricists engaged in formulating theories of concept formation, than on the most naïve mental oculists. Such sentences, which appear to present meaning as a tête-à-tête relation between a word and a universal, have been misinterpreted as entailing what might well be called a 'matrimonial' theory of the meaning of primitive or undefined descriptive predicates according to which the fact that these terms have meaning is constituted by the fact that they are associated with (married to) classes of objects. Yet that these sentences *entail* no such consequences becomes obvious once we reflect that it is just as legitimate and, indeed, true to say 'The German word "und" means and' as it is to say 'The German word "rot" means red'; where it is clear that 'und' gains its meaning not by a process of association with Conjunction or a class of conjoined objects, but rather by coming to be used with other symbols in accordance with familiar syntactical rules.

Let us examine the force of the form "' . . ." means —'. Suppose Smith says, 'When Schmidt says "und" it means and.' This statement clearly conveys the information that Schmidt has habits with respect to 'und' which parallel his own (Smith's) with respect to 'and'. Yet it must not be assumed that if it is the business of a statement to convey information of a certain kind, this information must be asserted by the statement *in the sense that a definitional unpacking of the statement would reveal it*. 'Jones ought to do A' conveys the information that Jones *can* do A; yet it is a mistake to suppose that a definitional unpacking of the former would reveal a sentence asserting the latter. Thus, Smith is not mentioning his habits, or the habits of English-speaking people generally, with respect to 'and'. He mentions the

¹ That the acquisition of a conceptual frame also involves *language departure transitions*, and that this notion is the key to the status of prescriptive discourse is argued in Chapter 11.

German vocable 'und' but *uses* the English vocable 'and'. He uses the latter, however, in a peculiar way, a way which is characteristic of *semantical* discourse. He presents us with an instance of the word itself, not a name of it, and, making use of the fact that we belong to the same language community, indicates to us that we have only to rehearse our use of 'and' to appreciate the role of 'und' on the other side of the Rhine.¹

Now suppose Smith to say, 'When Schmidt says "rot" it means red.' Once again this statement conveys the information, i.e. in *some* sense implies, that Schmidt has habits with respect to a German word which parallel his own (Smith's) with respect to an English word. But whereas if one supposes that Smith's statement *mentions* habits, the fact that it mentions 'rot' but uses 'red' is naturally taken to imply that the habits in question are of the word-thing variety, we now see that the statement has no such implication. Smith's statement conveys the information that Schmidt has word-thing habits with respect to 'rot' only in the course of conveying the *global* information that in *all* relevant respects Schmidt's habits with respect to 'rot' parallel his own (Smith's) with respect to 'red'.

Thus, instead of leading us to adopt a matrimonial theory of 'the meaning relation between "rot" and red', the explication of "'rot" means red' makes it clear that this sentence is not a relation-sentence at all, or, at least, that it is a relation-sentence only in a purely grammatical sense of this term. For its business is not to describe 'rot' and red as standing in a relation, but rather to convey the information characterized above.²

¹ Descriptive discourse, prescriptive discourse, and semantical discourse are three different modes of speech. Nevertheless, by virtue of what is presupposed by their correct utterance, statements in one of these modes may convey information properly formulated in another mode.

² The fact that such a statement as "'rot" means red' conveys descriptive information about 'rot' but does not describe it, undercuts the traditional problem of universals (and abstract entities generally). If one misunderstands the function of such statements, and supposes that "'rot" means red' describes 'rot' as standing in a relation to red, then, if one is anti-Platonist, one will be reluctant to use the semantical mode of speech, and will be particularly unwilling to allow an inference from "'rot" means red' to 'There is a quality which "rot" means'. Statements of the latter kind appear to make bold assertion of the *factual existence* of abstract entities which are suspected to infect the former. The truth of the matter is that the 'There is a quality (relation, possibility, particular . . .) . . .' of the latter is a purely logical device which has no connection with 'factual existence'. To say 'There is an obligation more stringent than promise keeping' is not to attribute 'factual existence' to obligations! For an elaboration of this and related points, see my essay 'Empiricism and Abstract Entities' in *The Philosophy of Rudolf Carnap*, edited by P. A. Schilpp, Library of Living Philosophers, Open Court Publishing Co., Wilmette, Illinois, 1963.

Now, the moral of all this is that we need no longer be hypnotized by the facile contrast between the 'linguistic meaning' and the 'real meaning' of a word. For to say that '*rot*' has real meaning, and, indeed, the real meaning *red*, is merely to convey the information that '*rot*' is the subject (beyond the Rhine) of a full-blooded set of habits sufficient to constitute it a word in actual use, and, indeed, a use which parallels our own use of 'red'. Consequently, to come to the point, if our use of 'red' involves extra-logical syntactical rules ('P-rules') as well as 'L-rules', it follows that '*rot*' could not have the 'real meaning' it does unless it, too, were subject to 'P-rules' and, indeed, 'P-rules' which parallel those obeyed by 'red'.

I shall suppose, then, that the conceptual status of descriptive predicates can correctly be attributed to the fact that they are governed by rules of usage. These rules of usage include extra-logical rules (about which we shall say more in a moment) as well as logical rules in the narrow sense (Carnap's L-rules). Those descriptive predicates which are conditioned responses to situations of the kind they are correctly said to mean, are called *observation predicates*. If a language did not contain observation predicates it would not be *applied*. Descriptive predicates other than observation predicates gain application through rules tying them to observation predicates. However, only if one supposes that for an undefined descriptive predicate to have descriptive meaning is for it to be associated with an extra-linguistic class of objects, is one forced to hold that all primitive descriptive predicates are observation predicates. One can, indeed, say that all the other descriptive predicates of a language must be 'defined' in terms of observation predicates; but it would be a mistake to suppose that in every case these definitions will be *explicit* definitions.

9. *Conceptual Status and Implicit Definition*. The above dialectical examination of concept empiricism has been so designed as to bring me to the position I wish to defend, a position which, as I see it, represents a meeting of extremes, a synthesis of insights belonging to the two major traditions of Western philosophy, 'Rationalism' and 'Empiricism'. Stated summarily, it claims that conceptual status, the conceptual status of descriptive as well as logical—not to mention prescriptive—predicates, is constituted, *completely* constituted, by syntactical rules. Notice that I am *not* saying that "'*rot*' means *red*' is true merely by virtue of the intra-linguistic moves proper to '*rot*' (in German). For "'*rot*' means *red*' can be true only if in addition to conforming to syntactical rules paralleling the syntax of 'red', it is *applied* by Germans to red objects; that is, if it has the same *application* as 'red'. Thus, the 'conceptual status' of a predicate does not exhaust its 'meaning'. The rules on which I wish to focus attention

are rules of inference.¹ Of these there are two kinds, *logical* and *extra-logical* (or 'material'). I can best indicate the difference between them by saying that a logical rule of inference is one which authorizes a logically valid argument, that is to say, an argument in which the set of descriptive terms involved occurs vacuously (to use Quine's happy phrase); in other words, can be replaced by any other set of descriptive terms of appropriate type to obtain another valid argument. On the other hand, descriptive terms occur essentially in valid arguments authorized by extra-logical rules.

Let me now put my thesis by saying that the conceptual meaning of a descriptive term is constituted by what can be inferred from it in accordance with the logical and extra-logical rules of inference of the language (conceptual frame) to which it belongs. (A technically more adequate formulation would put this in terms of the inferences that can be drawn from sentences in which the term appears.)

Finally, let me make the same claim in still another way by pointing out that where 'x is B' can be validly inferred from 'x is A', the proposition 'All A is B' is unconditionally assertable on the basis of the rules of the language. Our thesis, then, implies that every primitive descriptive predicate occurs in one or more logically synthetic propositions which are unconditionally assertable—in short, true *ex vi terminorum*; or, as it was put at the end of the preceding section, true by implicit definition. But a logically synthetic proposition which is true *ex vi terminorum* is, by the conventions adopted at the opening of the chapter, a synthetic *a priori* proposition.²

10. *The Synthetic a priori: A Terminological Decision*. If I had the courage of my definitions, then, it seems that I should proclaim myself a proponent of the synthetic *a priori*. Yet I feel uncomfortable. Is the synthetic *a priori* described above a *real* synthetic *a priori*? Would those who have fought and suffered for the cause of the synthetic *a priori* (and one has only to speak to a 'believer' to realize that it *is* a cause) welcome me to their ranks? I am afraid that the answer is No; that they would spurn my support and say that if this is all the synthetic *a priori* amounts to, it is not worth the name, and is probably a peculiar kind of *a posteriori*.

It does not take long to discover the reasons for their discontent, and the results throw new light on a venerable controversy. At the

¹ A more detailed statement and defence of my thesis will be found in 'Inference and Meaning', *Mind*, 1953.

² Note that, strictly speaking, one can only say that a sentence of L is true *ex vi terminorum*, as one can only say that a sentence of L is true *simpliciter*, if one's own language contains a translation of these sentences, which will not be the case if expressions occurring in these sentences conform to different P-rules from those obeyed by their closest counterparts in one's own language.

beginning of the chapter we considered four traditional criteria of *a priori* knowledge: (1) It is knowledge of *necessary* truth; (2) It is *certain* knowledge; (3) It is knowledge *independent of experience*; (4) It is knowledge of truth *ex vi terminorum*. We found it plausible to say that ultimately these four criteria coincide—after which we moved into the detail of our argument. I want now to bring out a certain ambiguity in the second and third of these criteria, and by so doing make clear that whether or not the position I have sketched is committed to a synthetic *a priori* is a matter for terminological decision.

Consider, to begin with, the third criterion, namely, *independent of experience*. Let us suppose that in our language 'All A is B' is one of the propositions which implicitly define the predicates 'A' and 'B' so that it is true *ex vi terminorum* that all A's are B. Using, as we do, this language or conceptual structure, we know that all A's *must* be B, that something which is not B cannot be A. This knowledge is independent of experience in the perfectly straightforward sense that it is a function of the very concepts with which we approach the world. As long as we continue to use these words in the same sense, continue, that is, to use the same concepts, we can never find an instance of A which fails to be B.

But though in this sense our knowledge that all A's are B is independent of experience, there is another sense in which it most certainly does depend on experience. After all, the learning of a conceptual frame, the learning to use symbols in accordance with certain logical and extra-logical rules is a psychological process essential elements of which are sensory stimuli, together with the rewards and punishments which the environment (including the social environment) brings to our motivations. The conceptual frame we have developed is only one of a vast number of alternative frames any one of which we might have been brought to adopt by a more or less radical shift in the course of our environment. The claim that our conceptual frame is only one among many possible conceptual frames, and that our adoption of it is to be explained in terms of learning theory rather than of insight into abstract entities, is what led our true blue proponent of the synthetic *a priori* to say that our synthetic *a priori* is a peculiar kind of *a posteriori*.

Next, a closely related remark on the second criterion, namely *certainly*. Let us suppose that a person has acquired a firmly embedded conceptual frame. In employing this frame, he will distinguish between those propositions which are *certain* and those which are *at best merely probable* on the evidence. The former will coincide with propositions which, in his frame, are true *ex vi terminorum*. Notice, however, that when the learning process begins to bring about a

modification of his conceptual frame, he will admit to being 'uncertain' of even those propositions which, in that frame, are true *ex vi terminorum*. It is clear from this description that *we are dealing with two different senses of the contrast between certainty and uncertainty*. The first may be called the 'intra-conceptual', the second the 'extra-conceptual' sense. Thus, it makes good sense to say, 'I am uncertain about its being certain that all A's are B.' Uncertainty in this *second* sense is not something that can be remedied by 'paying closer attention to what we mean'. It can be overcome (should this be desirable) only by more firmly learning to apply the conceptual system in question to experience, without hesitation or uneasiness.

But is this the goal of wisdom? Not if we are correct in maintaining that to all conceptual structures there are alternatives; and that no conceptual frame carries the imprint 'sterling' certifying it to be the conceptual frame to which all others, to the extent that they are 'coherent', approximate. The essence of scientific wisdom consists in being uncertain₂ about what is certain₁, in a readiness to move from one conceptual frame to another.¹ For not only can we be *caused* to modify our linguistic frame, we can deliberately modify it—teach ourselves new habits—and give reasons for doing so. Now, the use of a conceptual frame is the awareness of a system of logical and extra-logical necessities. The essence of scientific wisdom, therefore, lies in being tentative about what one takes to be extra-logically necessary.

In conclusion, if one means by synthetic *a priori* knowledge, knowledge which is logically synthetic, yet true *ex vi terminorum*, then, indeed, there is synthetic *a priori* knowledge. If one means by it, synthetic knowledge to which there is no significant alternative, then synthetic *a priori* knowledge is a myth, a snare, and a delusion. The question 'Is there a synthetic *a priori*?' calls, therefore, for a decision, before it calls for an answer. What the decision should be, that is, which meaning (if any) should be attached to the term '*a priori*', it is by no means easy to say. Many factors are involved, by no means the least of which is a sense of belonging to one or other of the two major traditions of Western philosophy. If one's overall loyalty is to Sextus and to Hume, one will be moved to say 'There is no synthetic *a priori*' and, hence, to choose a sense of '*a priori*' which will make this statement true. If one's heart beats with the rationalists, one will long to say 'There is a synthetic *a priori*', and will make the

¹ For an account in the spirit of the above argument of the causal modalities and the nature and rationality of induction, see my essay on 'Counterfactuals, Dispositions and the Causal Modalities' in Volume II of *Minnesota Studies in the Philosophy of Science*, edited by Herbert Feigl and Michael Scriven, Minneapolis, 1957.

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corresponding terminological decision. If one is tired of philosophical shibboleths, and finds important insights on both sides of the fence, one will content oneself with pointing out that while every conceptual frame involves propositions which, though synthetic, are true *ex vi terminorum*, every conceptual frame is also but one among many which compete for adoption in the market-place of experience.

II

SOME REFLECTIONS ON LANGUAGE GAMES

INTRODUCTORY

1. It seems plausible to say that a language is a system of expressions, the use of which is subject to certain rules. It would seem, thus, that learning to use a language is learning to obey the rules for the use of its expressions. However, taken as it stands, this thesis is subject to an obvious and devastating refutation. After formulating this refutation, I shall turn to the constructive task of attempting to restate the thesis in a way which avoids it. In doing so, I shall draw certain distinctions the theoretical elaboration of which will, I believe, yield new insight into the psychology of language and of what might be called 'norm conforming behaviour' generally. This chapter contains an initial attempt along these lines.

2. The refutation runs as follows:

Thesis. Learning to use a language (L) is learning to obey the rules of L.

But, a rule which enjoins the doing of an action (A) is a sentence in a language which contains an expression for A.

Hence, a rule which enjoins the using of a linguistic expression (E) is a sentence in a language which contains an expression for E—in other words, a sentence in a *metalanguage*.

Consequently, learning to obey the rules for L presupposes the ability to use the metalanguage (ML) in which the rules for L are formulated.

So that learning to use a language (L) presupposes having learned to use a metalanguage (ML). And by the same token, having learned to use ML presupposes having learned to use a *meta-metalanguage* (MML) and so on.

But this is impossible (a vicious regress).

Therefore, the thesis is absurd and must be rejected.