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TRUTH CONDITIONS AND CRITERIA

Roger Scruton and Crispin Wright

I—Roger Scruton*

I

Much of Michael Dummett's important book on the philosophy of Frege¹ is devoted to exploring the initial contrast, and ultimate connexion, between considerations of logic and considerations of epistemology. The contrast is made in its most extreme form by the theory of meaning that Dummett calls realism. But the connexion, Dummett believes, is made not only by Frege in his doctrine of 'sense', but also by the later Wittgenstein. To drop the connexion altogether—to hold that the philosophy of logic is quite independent of the theory of knowledge—is, one might say, to demote the concept of sense from the exalted place in the theory of meaning accorded to it by Frege, and to raise up the concept of reference in its stead. It is also to break the connexion between meaning and use, thus leaving to the theory of meaning only the kind of formal analysis that is concerned in the abstract with relations between words and the world: it is to leave us with nothing but the theory of truth, where truth, as Quine puts it, is simply a predicate of 'disquotation'.2 In this paper I shall reflect on one possible contrast between realism and 'verificationism' and shall be concerned to argue that, understood in a certain way, the two theories may in fact be compatible. I shall refer to some of Dummett's arguments, but it is possible that my reflections will have no more than a marginal bearing on the discussion in his book.

In several places, both in the book on Frege, and in "The Reality of the Past", Dummett argues that a theory of mean-

^{*} I have been helped by advice and criticism from many London colleagues, I am particularly indebted to: Mr. Mark Platts, Dr. Hans Kamp, Mr. Ian McFetridge, Mr. Colin McGinn, and Professor David Wiggins.

ing should also be a theory of understanding, since the meaning of a sentence is what we know when we understand the sentence. But a theory of understanding must show how we can understand a sentence, and also how we can manifest our understanding in actual use. In other words, it must show not only how language may be learned but also (and for contemporary philosophers this is perhaps a more interesting feature) how a man can be seen to have understood the meaning of what he says. The emphasis on learning, understanding and so on, is seen by Dummett to lead away from a purely 'referential' theory of meaning (a theory which analyses meaning only in terms of such notions as reference, satisfaction and truth) towards Frege's doctrine of 'sense', where sense is interpreted as the 'route' to reference. It is important to understand that here the word 'sense' has definite epistemological connotations. For Dummett the 'route' to reference is the procedure whereby we may discover the reference of a term; it is a necessary part of the verification of any sentence in which that term occurs with referential use. This epistemological conception of 'sense' should be distinguished from another conception to which I shall refer again later: the conception of sense as a purely mathematical entity (an entity to be characterized through a mathematical theory). Thus one might construe sense as a function of 'possible worlds', a function which assigns a reference to a term in each of a set of possible situations. I doubt that any such strictly mathematical conception of sense could alone make the connexion that Dummett requires between sense and understanding. The sense of a term is more like an operation which, once grasped, gives us the wherewithal to discover the items to which the term applies.

Realism, as I understand it from Dummett's account, involves two theses, the first being that the fundamental parameter in a theory of meaning is provided by the concept of truth. In other words, the meaning of a sentence is to be given in terms of its truth conditions, and not, for example, (or not necessarily), in terms of the conditions under which it is justified or correct to assert it ('assertibility conditions', for short). The second thesis of realism is this: the concept of truth required for a theory of meaning is a 'transcendent'

concept, a concept which allows for a sentence to be made true or false by a condition that lies beyond the reach of any actual or possible verification. The realist will argue that any other concept of truth will not really be a concept of truth at all; it will not be a 'world-oriented' notion (a notion that allows a sentence to be true only when it corresponds to the facts), but rather a 'speaker-oriented' notion, a notion that reduces truth to assertibility. The point is readily illustrated through the example of quantification over a denumerably infinite domain. Our thought rests on the acceptance of universal laws, laws of the form (x)Fx, the truth conditions of which must be stated in terms of the satisfaction of a sentence by a denumerable infinity of individuals. It is impossible that we should ever be able to establish conclusively that these conditions obtain. The universal law is verified as it were obliquely, through recognized inductive tests which, according to the realist, we understand as tests only because we also have a grasp of the truth conditions of the law. In other words we seem compelled to make a distinction between the conditions for the verification of a sentence and the conditions for its truth.

A realist might go on to argue that, unless we accept such a transcendent concept of truth, we will never be able to explain the many intuitions that we have about the validity of inferences between sentences of our language. A theory of truth should be able to lead us to an account of validity; only then will it have embraced all those aspects of linguistic behaviour that can provide evidence for a theory of meaning. But as it happens there seems to be no prospect of accounting for those inferences recognized by normal speakers as valid or invalid without assuming a transcendent conception of truth. (Consider, for example, how one might set up a theory of English that could explain the validity of the inference from 'There will always be a city here' to 'There will be a city here to-morrow'.) Indeed, Dummett recognizes that the antirealist position will lead to the denial of many of our intuitions about validity. But it may nonetheless, he thinks, embody the only concept of meaning that we can make intelligible to ourselves; in which case our intuitions must go by the board.4

Sometimes Dummett seems to argue as though truth conditions and assertibility conditions are indeed distinct, but that it is the latter which determine the meaning of any sentence. But such a view encounters serious philosophical difficulties. For one thing it will be hard-pressed to explain the meaning of sentences involving modality and tense. Moreover it would seem to imply that a speaker ought sometimes to be in a position to say that a sentence is assertible even though he does not know whether it is true. But surely, if he thinks that the sentence is assertible, this is tantamount to his thinking that it is true?⁵

It is better for the verificationist to argue that there is no distinction between truth conditions and assertibility conditions, so proposing a truth-theory for our language in which truth will be simply equivalent to assertibility. Such a verificationist will accept the first part of the realist's account of language—the doctrine of meaning as truth conditions—but reject the second—the transcendent concept of truth. He will hold that we should reject any concept of truth that causes truth conditions and evidence to diverge, since any such concept must break the connexion between meaning and understanding. Such a philosopher would for example not accept any truth-definition which includes the clause:

(1) $\sim p$ is T if and only if it is not the case that p is T.

For, if 'T' here means 'assertible', then (1) is plainly wrong. Furthermore, difficulties foreseen in the idea of quantification over infinite domains will be taken as grounds for developing a new notion of quantification, a notion for which truth and confirmation no longer fall apart. The process then ramifies, until a whole new logic emerges in answer to the epistemological anxieties from which the verificationist began. Indeed, as Dummett suggests, a thorough going verificationist will not be able to stop short of accepting the intuitionist logic of Heyting and Brouwer.

One must, I think, inevitably feel some dissatisfaction with that extreme form of anti-realism, which does so much violence to our ordinary way of thought. Exactly how far it can cope with the nature of mathematical truth is a deep and difficult question, and one for which I have no answer. But it

is worth saying that, in so far as concerns the non-mathematical parts of our natural language, the distinction between truth and evidence seems to be too deeply embedded to be capable of elimination. Kantian reflections might lead one to suspect that the distinction is central to the very concept of objectivity, and is therefore presupposed in all knowledge of an objective world. The verificationist will wish to argue, for example, that if we understand quantification over an infinite domain at all, it is only because we first understand how to quantify over a finite domain, where the truth of what we say may be tested mechanically, by the enumeration of instances. But suppose that we have to test the truth of the quantified sentence: 'All the men in this room are over six feet tall'. We could do that only by first individuating the men in this rooom, and distinguishing them from their surroundings. And to do that we should have to rely on inductive laws about the nature of things in general and of men in particular, not to speak of counterfactual truths about the way men respond to tests and so on. And all these in their turn can be understood only by someone who has a grasp of unrestricted quantification of the kind we are supposed to be accounting for.

Nevertheless, Dummett insists, we should be wary of the dangers of a theory of meaning from which all reference to verification has disappeared, the dangers, as he puts it, of extruding from logic all epistemological considerations. Thus he seems to recommend, in the book on Frege, some kind of middle way between realism and its opposite. The question I wish to ask, in what follows, is how, and where, may the reference to verification, or assertibility, be brought into the theory of meaning?

II

It is useful here to consider a theory of meaning which, despite its empiricist overtones, ought to be considered a realist theory, in Dummett's sense: the theory adumbrated in several recent articles by Donald Davidson. Davidson too relies on certain Fregean insights, in particular on the insight that no theory of meaning will be adequate that does not show how the meaning of a sentence is determined by

the meaning of its parts. Dummett (no doubt rightly) considers this to be the corner-stone of Frege's philosophy, and, if Davidson's arguments are sound, then Frege's insight must lead us to a theory that connects the meaning of a sentence with the conditions for its truth. Davidson arrives at his conclusion by drawing the parallel with Tarski's theory of truth for certain formalized languages. The paradigm for a theory of meaning then becomes the following: a theory that assigns truth conditions to every sentence of the language under consideration, and which satisfies two requirements, namely:

- (A) For any sentence s the statement of its truth conditions (which may be in a suitable metalanguage) must be derivable from whatever rules assign semantic interpretations to the independently meaningful parts of s.
- (B) The theory as a whole should satisfy Tarski's convention T, which includes, in Tarski's version, the requirement that it be possible to derive from the theory all sentences of the form (2):

(2) s is true if and only if p

where 's' is replaced by a structural-descriptive name of a sentence of the object language, and 'p' by a translation of that sentence into the metalanguage, or else (if the metalanguage is itself an extension of the object language) by that sentence itself. Only a theory that answers to this second condition can be considered, on Tarski's view, to provide an acceptable definition of truth.⁷

What is it to understand, or know the meaning of, a sentence? On one interpretation of Davidson's account we might say this: a man understands a sentence if he uses it as part of a language, and in conformity with whatever constraints are imposed by the truth-theory for that language. Thus, the rules of truth will also provide an account of the speaker's understanding. Why, then, should we feel an urge to introduce epistemological considerations into the theory of meaning? Is it not enough to give an account of truth-conditions, in the manner of Tarski, and will that not yield a sufficient criterion for distinguishing the man who understands a sentence from the man who does not?

One kind of uneasiness with that account can perhaps be expressed as follows: Just how are we supposed to characterize what is understood when a man learns how to use one of the atomic sentences of the language? A realist theory of truth may give a plausible account of complex sentences in terms of a recursive characterisation of the semantic contribution made by their structural parts. And it may also lead to a satisfactory explanation of our intuitions about validity.8 But can it show us how the atomic sentences of a language may be learned, or how an understanding of such sentences can be empirically ascertained? A verificationist will presumably say that it cannot; for a truth-theory, whether realist or not, cannot suffice to lead us to a full understanding of the sentences to which it assigns no structure. In fully explaining the sense of those sentences, therefore, we are automatically thrown back on some theory which tells us when it is correct or incorrect to assert them. In this way one might even consider that a realist account of structure can be combined with a verificationist conception of the meaning of individual sentences. And it may be that, in "The Reality of the Past", and in parts of the book on Frege, Dummett is working towards some such compromise.

But it should be apparent that the realist can now make a further move. For structure may also belong to atomic sentences, through their division into semantically relevant parts. And the rôle of such parts will also be described in any realist theory of truth. The reference to assertibility will then be, as it were, chased out of the sentence as a whole, and driven into the individual terms, in particular into the primitive predicates whose structural rôle in the sentences that contain them is explained by the recursive definition of truth. I shall try to make that somewhat obscure suggestion a little clearer.

Imagine a language which takes as its primitives the usual operations of predicate logic, together with a set of nonsense predicates of which we have no intuitive understanding, for example, the predicates 'gyre', 'gimble' and 'borogove'. Now we cannot be led to an understanding of the sentences of this language simply through dwelling on the recursions presented in its semantic theory. For example, we cannot be led to an understanding of the sentence (x)(borogove(x))

mimsy(x)) by learning that it is true if and only if every sequence that satisfies the open sentence 'x is a borogove' satisfies the open sentence 'x is mimsy', even when the offending predicates are given a transcription in the meta-language that allows this truth-definition to be developed formally. The problem simply becomes that of understanding the metalanguage itself. The point is that, from the standpoint of a semantic theory, at least some predicates must be considered to be primitive; so, a full understanding of them will require some practical knowledge of the occasions when they might be used to make assertions about the world. From the point of view of the observer speakers will be understood only when it is known on what occasions they will assert or assent to such a sentence as "borogoves are mimsy'.

In other words, we can regard semantic theory as explaining our understanding of language only in so far as it settles questions of structure (or 'logical form'). Primitive terms of the language will be treated by semantics in a manner that only partially describes our understanding of them. Hence, as Davidson insists,9 we must separate questions of logical form from questions of individual analysis, which remain when logical form has been finally arrived at. Indeed, the emphasis on truth conditions in the theory of meaning stems almost entirely from the attempt to clarify the logical structure of sentences, and to account for the logical relations between them. It has a bearing on the theory of understanding in that it offers an explanation of how our understanding of the primitive signs of a language leads to our understanding of the whole. But it only partially answers the question how the primitives themselves are understood.

But of what relevance is all that to the doctrine of realism? Perhaps an example will clarify matters. Compare the sentences 'John is in pain' and 'John believes that snow is white'. It would be the task of any developed philosophy of mind to account for our understanding of both of these sentences. But the second presents a special problem of semantic analysis that is not presented by the first, the problem, what contribution is made to the truth conditions of the sentence as a whole by the semantic assignments to the terms 'snow', 'is' and 'white'. In this way semantic analysis

will make a real contribution to the theory of understanding. But the verificationist will wish to argue that it cannot complete that theory, and will point to such sentences as the first of our pair in defence of his position. Someone who does not understand the sentence 'John is in pain' wishes to know what it is to be in pain, and inevitably the explanation that will answer this question will have an epistemological element. For the verificationist, there can be no complete analysis of an individual predicate that is epistemologically neutral. To explain what it is for John to be in pain is to show also how we might discover that John is in pain.

But suppose we agree with the verificationist. Does that destroy the possibility of a realist conception of truth? I think not. For individual analysis, as the verificationist might construe it, will not be a part of, or an alternative to, semantics. The point is established, I think, by the following consideration. We can make no complaint against a theory of truth provided it satisfies the conditions stated by Davidson, in particular, provided it entails all sentences of the form

(2) s is true if and only if p

where 'p' is replaced by the appropriate translation into the metalanguage of s. But in this schema the "if and only if" is construed extensionally and, I think, must be so construed. It could perhaps be argued that it is a necessary truth that 'Der Schnee ist weiss' is true in German if and only if snow is white. But if that is so it is because of conditions which attach to the meaning of 'true in German', not because the 'if and only if' is given a non-extensional interpretation in the truth-theory. The semantic theory is indeed a theory about what is meant by 'true in German', but the apparatus which it uses belongs to the extensional part of logic. It must be remembered that for philosophers like Davidson a theory of truth is an empirical theory, leading to a method of 'radical translation' which may be used to correlate sentences of an alien language with conditions in the world. It is tested by discovering a matter of fact correlation between sentences accepted as true by foreign speakers, and conditions stated in a language of one's own. Consequently, the theory cannot rule absolutely against the replacement of 'p' in the truth definition by some other sentence that happens to be extensionally equivalent to p. As Davidson points out, ¹⁰ there is no objection in principle to a truth-theory that correlates 'snow is white' with (the translation into the metalanguage of) 'grass is green', provided that it happens to pair truths with truths and falsehoods with falsehoods throughout the object language under consideration. If we distrust such a theory it is because we do not yet understand how it can generate only acceptable correlations.

It seems to me, however, that, having introduced epistemological considerations into our analysis of the meaning of individual predicates, we ought not then to assume that the analysis will only be extensionally equivalent to the analysed term. If that is so, then the factors introduced into the concept of meaning by the requirement of verifiability may very well not be factors that are expressible in semantic terms. In other words it may be that the contrast between verificationism and realism may not always be expressible in terms of rival theories of truth. For verificationism may be construed as a theory about whatever is left to the analysis of individual predicates after questions of structure have been answered. But such individual analysis attempts to account for the primitives of a language and plays no part in the recursive theory of truth. And indeed, if we attempt to make it a part of the complete semantic theory we may find ourselves violating the requirement of extensionality that seems integral to any plausible semantic theory.

For the verificationist the question "What does the predicate 'F' mean?" involves the question "How am I to know that something is F?" Only when I am in a position to answer the second of these questions to my satisfaction (whether or not explicitly is unimportant) can I manifest my understanding of the predicate 'F' in linguistic practice. I shall then be possessed of a procedure that enables me to apply the terms. But we see now that in answer to the verificationist's question that consists merely in an extensionally interpreted rule of truth may very well not be adequate. For the answer ought to tell us what is grasped when a given primitive of our language—the predicate 'F'—is understood; and it might be said that 'what is understood' stands for

the intentional object of a mental attitude, and cannot, therefore, be fully characterized in any context that permits the substitution of extensionally equivalent terms. Suppose it happened that all and only people in pain twitched their toes. To remark on that fact would not be to give an analysis of the concept of pain; it would not tell us 'what it is' for someone to be in pain. In philosophical analysis we are attempting to discover more than the mere extension of a term; we are attempting to reveal what is involved in understanding the term—say, 'pain'—and this involves saying something about what a man must grasp if he is to be said to 'know what it is' to be in pain.

Dummett seems not to accept the view that I am here advocating, that an emphasis on justification may arise only in individual analysis and so introduce no modifications into a realist theory of truth. Dummett advances various arguments in support of his claim that 'realism' cannot give a full account of the meaning of sentences. For example, he argues that if we regard the meaning of a sentence as entirely exhausted by the conditions for its truth (i.e., if we accept the first part of the realist's thesis), then analytically equivalent sentences must mean the same. He puts the point in the following way:

In a purely realistic theory of meaning the relation between sense and the recognition of truth will be ignored altogether. As a result we are then forced to conceive truth-conditions, considered as determining sense, not in terms of any procedure, even ideal, for coming to recognize truth-value, but as relating solely to the way the world is, independently of our apprehension of it. The most refined distinction between the senses of two sentences which it then becomes possible to make is according to the different possible worlds in which they would be true: hence . . . analytically equivalent sentences have the same sense, and analytically true sentences have no ordinary sense at all. This is exactly what happened in the theory of meaning presented in Wittgenstein's *Tractatus*.¹¹

But Dummett's thought in this passage is surely wrong, on

two counts. First, it is wrong in the contention that a purely realist theory of meaning can make no distinction between analytically equivalent sentences. Secondly, it is wrong in its assumption that the distinction is made in Frege's doctrine of sense because of the *epistemological* flavour of that doctrine. To take the first point: it seems clear that two sentences may be equivalent while having different truth conditions, simply because the truth value in either case is determined by the semantic properties of quite different signs. Consider, for example, the equivalence that exists between any proposition and the disjunction of that proposition with some arbitrary contradiction. Consider, for example, the equivalence between (3) and (4):

(4)
$$p \vee [(x)Fx \& (\exists x) \sim Fx]$$

It would be surely wrong to say that, from the point of view of realism, the truth conditions of (3) and (4) are identical. For we arrive at the truth value of (4) by passing through the semantic properties of quantification, conjunction, and so on. And the same principle may even apply when we consider two logical truths. Consider, for example, two logical truths involving different proper names:

(5)
$$\square$$
 F (John) \supset ($\exists x)Fx$

(6)
$$\square$$
 G (Bill) \supset ($\exists x$) Gx .

A realist model theory would establish the logical truth of (5) by regarding only those 'possible worlds' where John exists, and the logical truth of (6) by regarding only those worlds where Bill exists. It cannot be, therefore, that the truth conditions of (5) and (6) are necessarily the same.

Now, in giving an account of the difference between (3) and (4), say, one might re-introduce a notion of 'sense'. For it is clear that, in one sense, the 'route' to the reference (truth value) of (4) is quite different from the 'route' to the truth value of (3), even though their truth values will always be the same. But it does not follow from this that the 'route' to reference should be specified in epistemologically relevant terms, that it should be a means for the recognition of truth

value, in the sense intended by Dummett. It is sufficient, for the distinction in question, that the sense of a term be specified purely mathematically, as a function that assigns a reference to that term in each of a multitude of 'possible worlds'. Such a function need tell us nothing about how we might discover, in our world, some item to which the term in fact applies.

Just where, then, does the epistemological component in the concept of meaning impinge on the theory of truth? I have suggested that the answer may be nowhere. For verificationism may be simply a theory about the meaning of individual predicates. In which case it will have no bearing on questions of logical relation and of logical form.

Ш

Let us turn now to the kinds of considerations that may arise in the analysis of individual predicates. Suppose we have a complex predicate, for the application of which necessary and sufficient conditions may be stated. Such a predicate need not be listed among the primitives of our language, since all sentences containing it can be derived from other sentences in which it does not occur. Suppose, then, that the predicate 'F' is definable in terms of 'G', 'H' and 'I'; some such truth as the following will then be an accepted part of the world view of all competent speakers:

$$(7) \square (x)[Fx \equiv (Gx \& (Hx \lor Ix))]$$

But, as a result of Wittgenstein's work, many philosophers have wished to argue that individual analysis does not proceed by discovering equivalences of this form, indeed, that it cannot do so. On Wittgenstein's view a predicate is held to bear certain necessary relations to its 'criteria', where these need be neither necessary nor sufficient conditions but simply 'the kind of thing one has in mind' when applying the predicate. Some philosophers have expressed scepticism about the utility of such a notion. It is apt to seem like a minor amendment to the necessary-and-sufficient condition model of philosophical analysis, or else an unformed epistemological notion that has nothing to do with analysis whatso-

ever. One reason for this latter view is that criteria are usually spoken of as the conditions for something's being F; and it seems that we could only understand this idea if we already had a grasp of the distinction between subject and attribute, and of the ideas of conjunction, disjunction and so on that would be needed to form the requisite rule. In other words, our application of criteria presupposes a primitive grasp of semantic structure. But the question what comes first in understanding language—or indeed whether there could be anything that literally 'comes first'—is not at this juncture a very interesting one. In fact the objection does no more than remind us once again that semantics is essentially a study of language structure, and that the concept of truth developed in semantics is not something that can be put aside or amended in the light of considerations that arise only in the analysis of individual terms. If philosophers think that the Wittgensteinian approach to predicates in a natural language is at variance with a realist theory of language structure it is because they confuse the kind of indeterminacy introduced by the criterion theory of meaning with the highly technical and semantically pregnant feature of 'undecidability', which belongs solely to certain complex predicates in mathematics. But that confusion need not concern us.

Nothing can be made of the concept of a 'criterion' if it is taken simply to mean 'truth condition' in the sense that I have been considering. A criterion, on Wittgenstein's view, is connected with a rule of language; involved in understanding a term is the knowledge of criteria for its application. As we shall see, even on Wittgenstein's view this cannot be all there is to the specification of the sense of an individual predicate; but it is the first step in the specification of sense. A criterial rule gives a procedure for applying a term, which we can see to be followed by the person who correctly uses the term. Typical of such rules are the following:

(A) if something is observed to be F then (it is right to) call it 'G':

And, more loosely:

(B) If something is observed by you to be F, then you have a reason (there is a reason) to call it 'G'.

Three points need to be mentioned in order that (A) and (B) should not be misinterpreted: (i) the term 'observed' must be interpreted widely, so as to cover all that is scientifically observable. Wittgenstein makes clear in the Blue Book that the criterion of a certain disease may consist in the presence of a bacillus and not in any more manifest symptoms. (ii) Rules (A) and (B) are stated in terms of when it is right or reasonable to say something; in terms of 'assertibility conditions'. But this will be seen to have no anti-realist implications. (iii) It is in no way necessary that (A) and (B) should be explicitly formulated. If all rules of language required explicit formulation then language could never be learned, since it would be presupposed in the rules for its own comprehension. The statement of a criterion is a résumé of actual practice, a specification from the observer's point of view of how speakers understand a term. Ostension may therefore very well play an important part in the characterisation of the criterion 'F' in (A) or (B).

It might further be objected to (B) that it presupposes an understanding of the idea of a reason, before any predicate (other perhaps than the very simplest) can be grasped. But that objection again makes the mistaken assumption that those concepts involved in the *statement* of a rule of language must also be part of the linguistic competence of those who *use* the rule. It would be more correct to say, logically speaking, that the concept of a reason is introduced at a later stage, in order to describe the instinctive linguistic behaviour involved in the mastery of the linguistic basis. But there is no sense in thinking of criterial, or indeed of semantic, relations as being grasped in a definite temporal sequence, so that the competence of a speaker at any point can be limited to some specifiable series of basic moves.

It might seem, from rule (A), that a criterion is no more than a logically sufficient (though clearly not necessary) condition. But that would be a mistake. A sufficient condition is not a rule of language (a rule stating when it is correct for something to be said), first, because it is not a normative statement, secondly, because it uses language and does not mention it. Typically, a logically sufficient condition will be stated as follows:

(C) If something is F then it is G

where the 'if . . . then . . .' is construed as a sign of strict implication. (As I have already argued, merely materially sufficient conditions will play no part in a philosophical analysis designed to answer questions of epistemology). In (C) the predicate 'G' is not mentioned but used; nor does (C) employ any notion of the rightness or wrongness of a linguistic act. Nonetheless, there may be a sense in which a logically sufficient condition may resurge in the language as a 'reflection' of a linguistic rule, just as there are logical truths in formal languages that arise from definitions. But even so, it would be wrong to think that (C) was a consequence of the rule (A). For (A) is only a characterisation of linguistic practice, and, as such, and like any scientific law other than the most theoretical, it assumes for its statement a certain background of normal conditions. It follows that the only logically sufficient condition that could be derived from (A) will contain explicit mention of those conditions. In other words (A) achieves its proper 'reflection', so to speak as:

(D) If conditions ϕ obtain, and if a thing is F, then it is G

where once again the 'if . . . then . . .' has the force of strict implication. In other words, (D) should be read as $\phi \to (Fa \to Ga)$; or $(\phi \& Fa) \to Ga$. For, given that (A) fixes the meaning of 'G', and given certain further conditions that I shall mention shortly, the material implication version of (D) becomes true by virtue of the meaning of 'G', and cannot cease to be true without the meaning of 'G' thereby changing. Hence, given the meaning of 'G' it is necessarily true that the conditional stated in (D) should hold. Hence we see that *one* notion of an 'assertibility condition'—that captured roughly in (A)—leads unproblematically to the notion of a logically sufficient condition. But, of course, if this is how the notion of assertibility is explained, then no contrast has yet been introduced between realism and

verificationism in the theory of truth. The only contrast that might conceivably be involved is that between a theory that regards individual analysis as involving a statement of logically necessary and sufficient conditions, and a theory that specifies criteria, or rules of practice. But, as we have seen, the second kind of theory may very well lead us straight back to the first.

IV

In order to introduce the second formulation of the notion of a 'criterion'—(B) above—I shall consider two examples. The first—which I adapt from Miss Hidé Ishiguro—is provided by the concept of 'Ruritanian Nationality'. Let us suppose that no precise legal definition of Ruritanian nationality has yet emerged. The Ruritanian Government has not yet found reason to worry about immigration, emigration or the purity of the race. Consider, then, the following predicate: being born in Ruritania of parents who were born in Ruritania and who have lived there more or less continuously; or: being born of Ruritanian parents' ('\psi' for short). Being ψ is a criterion of Ruritanian nationality in the sense that it is right to call someone 'Ruritanian' if conditions are, to the best of one's knowledge, normal, and he possesses property ψ . There are many exceptions, examples of which we can imagine being spelled out in some civil servant's manual. Thus someone born in Ruritania of Atlantian parents might have remained Atlantian speaking, and married someone in a similar position. Would we say that their bi-lingual children are Ruritanian? I do not know; for the conditions are now so abnormal that our rule of language does not give us accurate guidance. But that we cannot decide this question does not show that our understanding of the word 'Ruritanian' is deficient.

In any actual situation, legal definitions will soon arise in the search for a procedure that will decide each available case. Note, for example, how the notion of British nationality has evolved through the British Nationality Act 1948 and the Immigration Act 1971. Even here, however, there will be doubtful cases that must go before the judges. The judge's decision will, if you like, constitute a new extension of the

concept, laying down a precedent that must be followed or overruled.

In relation to a criterion such as ψ we can imagine various tests of nationality, the possession of documents being the most obvious. Such tests are not criteria; they only become tests by virtue of a matter of fact connexion set up between them and the genuine criteria of the predicate. In this sense, recognition of a test presupposes knowledge of a criterion, but not *vice versa*.

The example is an artificial one, where classification serves a legal rather than a scientific purpose. Are there any obvious examples of terms whose meaning derives from criteria for their application and which are not simply trivial examples of man-made classifications? Some philosophers have doubted that there are, feeling that, in the standard scientific case the sense of our general terms is not provided by their rules of use, but rather by the world, by the entities to which the terms refer.12 The grounds for such a view I shall consider shortly. But, whatever its truth, and whatever its consequences for the criterion theory of meaning, the doctrine I have just referred to—the general doctrine of the primacy of natural kinds-need not deter us from recognising that there are 'natural' examples of rule (B). It is precisely for these 'natural' examples, where we are attempting to summarize in a predicate a possibly complex and pre-existing natural phenomenon, that rule (B) is, I think, most useful. For in the kind of case I am considering the background assumptions remain so vast and indefinite that the best one can say, in summarizing how a predicate is understood, is that there is a reason to apply it in some circumstances, not in others; and that, if sufficiently many reasons are present, then the predicate should be applied. But one may be very reluctant to specify what 'sufficiently many' amounts to.

For example, suppose someone were to ask for a definition of the term 'cave'. We should reply by listing criteria, in the following way: a cave is a hole in solid rock, large enough for a man to enter, roofed over, and deep enough to become dark inside. Such a definition does not state a sufficient condition. Nor does it unambiguously commit one to saying that this is when it is *right* to say that something is a cave.

This is not only because abnormal cases are so easy to imagine: it is also because there are perfectly normal cases, which are familiar objects of scientific study, where the 'criteria' are fulfilled, and yet where we are reluctant to speak of caves. For example, a mass of rock may be shifting with such rapidity that any holes of a suitable size are sealed up as soon as formed. Some rocks contain cavities that are perforated everywhere by smaller holes, leading to light on the other side. And so on. Our use of the criterion stated is guaranteed by certain natural laws which ensure that such a criterion captures one part of a general and significant phenomenon. When enough features of the criterial kind are present, the possibility that the features are not united in the manner dictated by the relevant natural laws diminishes; what was a reason then becomes a right.

It might be asked how it is, then, that criteria are to be distinguished from symptoms in these 'natural' cases: why cannot any fact about caves function as a criterion for something's being a cave? Why do we make the distinction between features that are necessarily reasons and those that are only contingently so, when the notion of a 'necessary reason' is itself held to rest on deep but contingent truths? If we did not make this distinction, if we gave a merely extensional characterisation of any concept, listing all those things that happened to be true about its instances, then we should certainly have removed the last trace of the epistemological concept of 'sense' from our theory of meaning. We should have granted to the extension of a term sole authority in determining its sense. In answer to such a radical objection I can here do no more than express my scepticism about the extensionalist programme. It is indeed because the world is as it is that we are able to develop our concept of a cave; but certain theoretical assumptions are built into that concept. It follows that the boundary between the contingent and the necessary may be difficult to draw. But that does not mean that the distinction between the necessary and the contingent (between what has to be understood by a competent speaker and what does not) can be simply dropped from our theory of language altogether.

V

The first conclusion to be drawn from the foregoing discussion is this: there may well be a procedure of individual analysis that can explain the sense of a predicate independently of semantic theory. Such a procedure consists in laying down rules for when it is correct to say something rather than rules of truth. But it need not conflict with the 'rules of truth' laid down in semantic theory, and does not entail antirealism as a theory of meaning. Critieria are not generated by a semantic theory; nonetheless they may be, as it were, subsumed under it, and thereby incorporated into a total account of our understanding of language. Thus we can combine an epistemological account of the understanding of individual predicates with a realist account of the truth conditions of the sentences in which those predicates occur. Moreover, a 'criterion' theory of analysis is inherently epistemological in character, for if the presence of a condition were not essentially discoverable, it could never be observed that someone was following a rule of language which exalted that condition to the status of a criterion. Hence we could never have grounds for supposing that the condition really was a criterion. Now, this might lead us to suppose that criteria must be 'directly observable' properties, or properties for the presence of which direct empirical tests can be conducted by the 'normal' observer: properties like colour, shape and sound. But to suppose such a thing is once again to ignore the theoretical and explanatory character of our concepts. It is also to ignore a far more important feature of our language: the fact that it contains predicates that denote 'natural kinds':

Two contemporary philosophers—Hilary Putnam and Saul Kripke—have brilliantly presented to us the problem of natural kinds. The salient features of natural kind terms may be summarized, for present purposes, as follows: If 'G' is a natural kind word, then saying that x is G is scientifically speaking the best kind of answer that can be given to the question 'What is x?' It is the best answer because it says what x fundamentally is; it locates x as belonging to a kind that is assigned an unchanging essence by the available

scientific theory. To say that x is G is therefore to characterize x in a way that is maximally explanatory and hence maximally predictive. If 'G' is a natural kind word, then it may be that all our normal tests for something's being G are merely tests; and, in consequence, it could be that there are Gs to which those tests do not apply. For example, it could be that the tests for something's being an orange—in terms of its colour, taste, texture, size and shape—apply in fact to a certain species of deviant apple; and it could be that there are oranges in central Asia which are squarish, smooth, bitter and green. Finally—and this is the most important point—the sense of a natural kind word 'G' is determined not by convention, but by the world. Or rather, for it is of course a matter of convention that the word 'gold' does denote a natural kind, what that kind in essence is can be learned only from observation of the world, and through the development of a scientific theory about our paradigms of gold. We might say that natural kind words connote the real essence and not the nominal essence of that to which they apply.

If we return now to our two statements of the notion of a criterion we see that, if these are to give an adequate characterisation of our understanding of the predicates of our language, the schematic predicate 'F' used in formulating the rule must cover a wide range of examples. 'F' need not coincide with any of those tests whereby speakers introduce and apply the predicate 'G'. Sometimes the tests will be criteria; we shall know whether this is so from observing subsequent practice. On other occasions, however, the tests involved in teaching the word will be understood as enabling the speaker to discover what the criteria are, but will not be taken as criteria. The creation of this distinction reflects a property of the language as a whole: the potential division of reality into substance and attribute. It is interesting that Wittgenstein's most clear-cut example of a criterion, given in the Blue Book, is precisely of such a 'discovered' criterion for the use of a natural kind word. This kind of example makes clear to us that it is not possible to explain in the abstract how rules like (A) and (B) are understood by those who apply them without having recourse to fundamental distinctions of category that belong to the structure of the language as a whole. The process of language acquisition is a matter of pulling oneself up by one's own bootstraps. While the criterial rules show how the individual predicates are understood, they do so only in the context of an understanding of the semantic structure into which they are ultimately drawn.

I should like to conclude with an observation about evaluative discourse. It is often said that to explain the meaning of 'X is good' in terms of the speech-act that this sentence is standardly used to perform is to deprive oneself of any account of the constancy of meaning of the sentence in complex contexts. For example, one will have no satisfactory account of its meaning in the complex sentence 'If X is good then X is happy'14. But it seems to me that such a complaint is without force. For the speech-act theory of 'good' ought to be interpreted as a theory about the assertion conditions of the sentence 'X is good', that is, as a proposal for individual analysis and not as a suggestion about logical form. The point of view of those philosophers who have wished to defend a distinction between description and evaluation might then be put as follows. For some predicates, the assertibility conditions take the form:

(E) If you have attitude A towards x, then it is right to assert 'G(x)'.

Taken in conjunction with a speaker's semantic understanding of the rôle of 'G' as an adjective, this rule immediately introduces into the language an adjective which functions quite normally in complex sentences and in ordinary assertions, and yet which is standardly used to express an attitude, not to describe a fact. Note that the rule does not amount to introducing a description of the attitude A. For it explicitly assigns the predicate 'G' to the objects of an attitude, not to the state of mind itself. In other words, 'X is good' will not be represented in a realist truth theory as equivalent to 'I approve of X' or whatever. For if it were so represented we should be unable to explain why a native speaker does not regard as valid the inference from 'X is good' to 'I exist'.

The example is interesting, since it goes to show that, after all, the question of the distinction between description and evaluation is not one that falls within the province of the theory of truth, and is therefore not one which is affected by considerations arising from that theory. If we now compare (E) with (A) or (B) we can see that there might after all be a genuine contrast between descriptive and evaluative language. The contrast will emerge as soon as we consider the explanatory rôle assigned to predicates by these various rules. The consistent application of a descriptive predicate may as I have argued—form part of an innate scientific theory about the items to which it is applied. But in the case of the evaluative predicate no such theory is implicit in the rule of assertion. If asked to explain such a concept, therefore, the relevant facts will concern human beings and their attitudes. And surely it is this above all that people have had in mind in making the distinction between description and evaluation: that the application of some predicates seems to be part of, and partly the result of, an attempt to explain the world; whereas the application of certain other predicates is, rather, indicative of human nature.

NOTES

- ¹ M. Dummett: Frege, Philosophy of Language. London, 1973.
- ² See, for example, *Philosophy of Logic*, Englewood Cliffs, N.J., 1970, p. 12.
- 3 P.A.S., 1968-9.
- 4 Ibid., p. 244.
- ⁵ See also Susan Haack: Deviant Logic, Cambridge, 1974, pp. 105-8.
- 6 "Truth and Meaning", Synthese, 1967, and "In Defence of Convention T", in H. Leblanc (ed.): Truth, Syntax and Modality, Amsterdam 1973.
- ⁷ A. Tarski: "The Concept of Truth in Formalized Languages", reprinted in Logic, Semantics, Metamathematics, Oxford, 1956. For Davidson, a truth-definition of Tarski's kind must be replaced, when we are dealing with a natural language, by a truth-theory. The second requirement therefore has to be modified slightly, in a way that does not here concern us. See "Truth and Meaning", cit., and "Belief and the Basis of Meaning", Synthese, 1974, esp. pp. 317-318.

8 Some might wish to say that it is not truth theory but rather model theory that is required to give a proper account of validity. The issue is, strictly speaking, independent of the dispute between realism and verificationism. Besides, it is by no means obvious that truth theory cannot do the job: see D. Davidson: "On Saying That", in Davidson and Hintikka (eds.): Words and Objections, Dordrecht, 1969, p. 160.

Words and Objections, Dordrecht, 1969, p. 160.

9 "Truth and Meaning", cit., p. 316.

10 Third mm out to

¹⁰ Ibid. pp. 311-12.

¹¹ Dummett, Frege, p. 590.

12 I refer here to natural kind words, among others. I have had the benefit

of seeing an interesting, but unpublished paper by David Wiggins.

18 H. Putnam: "Is Semantics Possible?", in M. K. Munitz (ed.): Identity and Individuation, New York, 1971, and S. A. Kripke: "Naming and Necessity", in G. Harman and D. Davidson (eds.): The Semantics of Natural Languages, Dordrecht, 1972.

14 See, for example, P. T. Geach: "Assertion", Phil. Rev. 1957, and J. R. Searle: Speech Acts, Cambridge, 1970, ch. 6.

TRUTH CONDITIONS AND CRITERIA

Roger Scruton and Crispin Wright

II—Crispin Wright

The observation is now commonplace that to have mastered a language of expressive power comparable to that of most natural languages is to understand a (potential) infinity of sentences. What ought to be aimed at by a theory of meaning for such a language is a systematic account of this knowledge. So the least the theory must achieve is a lot. It must provide a model of a master's recognition of the sense of any significant declarative sentence in his language. This recognition, it seems certain, is based on knowledge of the meanings of the constituents of a sentence and an appreciation of the way in which they are therein strung together. We therefore seek a theory which for an arbitrary declarative sentence of the language:

- (i) provides a breakdown of it into atomic semantically relevant constituents, such that the sense of each such constituent is of a general type described by the theory;
- (ii) within the framework of these general types, characterises the *specific* senses of the constituents of the sentence in such a way that:
- (iii) an account of the sense of the sentence issues in a manner determined by its being a combination in just that fashion of just those constituents of just those general types.

The idea is that a correct theory of this sort will codify part of the information implicit knowledge of which constitutes knowledge of the language; that is, explicit knowledge of the theory would suffice for knowledge of part of the language. But only of part of it; nothing would yet have been said about commands, questions, etc.

Such a theory would be empirical. It would be contingent whether it characterised correctly the sense of any particular sentence in the studied language. The *philosophical* task is

to determine the exact form which the theory should take. What primitives may the theory allow itself? What syntactic categories of expression (types of sense, as above) ought it to admit? How in general is the sense of a declarative sentence to be characterised? These are questions which become programmatically urgent. But they raise long-standing philosophical issues concerning explanation, logical form, and the nature of knowledge of meaning.

It is to this philosophical task that the leading ideas of Davidson, with which Mr. Scruton believes himself to have some sympathy, are intended as a contribution. Indeed, if like Davidson¹ we believe in "the obvious connexion between a definition of truth of the kind Tarski has shown how to construct and the concept of meaning", namely: "to give truth-conditions is a way of giving the meaning of a sentence", then the general account of the project commended by Davidson is plausible.

In the first half of his paper Scruton is concerned with the charge that Davidson's blue-print—like any implicitly realist conception of meaning, in the sense characterised in Scruton's §1—leaves out of account essential epistemological aspects of the concept of meaning, somehow overlooks that a theory of meaning ought also to be a theory of understanding. It does so because it is an example of a "purely 'referential' theory of meaning, a theory which analyses meaning only in terms of such notions as reference, satisfaction and truth" and gives no work to "verification or assertibility". Scruton conceives this charge to issue from the 'anti-realist', or 'verificationist', 2 standpoint sketched in many of Dummett's writings. It is with exposition of this complaint that I shall primarily be occupied, for I do not think that Scruton has fully grasped its character—that is, the character which in my opinion it ought to have. It is true that he explicitly disavows any concern but with "one possible contrast between realism and verificationism", and that it is only, presumably, as understood in that way that "the two theories may in fact be compatible". But this is hardly interesting unless he believes that his interpretation of the 'verificationist' position may well do justice to its strengths and motivation. That is what I deny.

I take it that Scruton is recommending the following view of the matter. There are indeed epistemological questions concerning language-mastery to which a realist theory, e.g., as envisaged by Davidson, does not address itself. But in order to face these questions, it is not required, as is supposed by an anti-realist, that the central rôle in the theory be played by conditions other than those of (possibly verificationtranscendent) truth. Davidson is right in thinking that we have a theory of meaning for a language when we have a systematic means for determining the truth-conditions of any of its declarative sentences, based on an account of the sentence's structure and the semantic rôles of its structurally essential constituents. Unless the theory takes this form, it will be incapable of achieving one end which a theory of meaning certainly ought to achieve: that of explaining our judgments of logical validity. Otherwise, like the Mathematical Intuitionists, we shall wind up with a theory enjoining extensive revision in our conception of what principles of inference are valid. A theory which "does so much violence to our ordinary way of thought" ought to be avoided. Rather, what truth-theory requires, if we are to achieve a full understanding of the workings of our language, is supplementation.

What sort of supplementation? Davidson distinguishes two tasks: "uncovering the logical grammar or form of sentences (which is in the province of the theory of meaning as I construe it) and the analysis of individual words or expressions (which are treated as primitive by the theory.)"3 Scruton's suggestion is that it is in this supplementary work of analysis that justice can be done to the demand that the theory of meaning face certain epistemological issues: how the expressions treated as 'primitive' by the theory are understood, what e.g., it is to be in pain. Thus the latter part of his paper concentrates on the question how Wittgenstein's notion of a criterion, or refinements of it, may figure in such analyses. The outcome is to be that we may legitimately "combine an epistemological account of the understanding of individual predicates with a realist account of the truthconditions of the sentences in which those predicates occur." For "the criterion theory of analysis is inherently epistemological in character."

My suspicion is that a large part of the motive for this suggestion originates in a confusion about the sense in which a truth-theory will treat certain of the object-language's predicates as primitive. Naturally, it will conceive of some of them as semantically unstructured. But it will not confine itself to a characterisation of their semantic type. In a fullyfledged such theory there will be, for each such predicate of the object-language, a base-clause specifying in the chosen metalanguage the exact conditions under which an n-tuple (or infinite sequence) of objects satisfies it. But the connexion between satisfaction-conditions and predicate sense has every right to be thought as perspicuous as that between truthconditions and sentence sense; the connexions, indeed, are interwoven. So why does an adequate truth-theory for a language not already characterise perfectly the senses of its primitive predicates? How is it that we do not have in the base-clauses of the theory a complete characterisation of what it is that someone who understands the primitives knows, viz., their conditions of application?

It is, of course, perfectly true that, as Scruton emphasises, the axioms in question give us no way of explaining the meaning of primitive predicates to someone who is not familiar with the metalanguage. In order to understand any theory, one has to understand the language in which it is couched. But why should a philosopher—and how is he competent to-be interested in how an understanding of these predicates can be imbued? (It might be possible to induce it biochemically.) His proper concern is in what understanding the expressions consists; and this a complete truth-theory will purportedly tell us. The anti-realist's charge will indeed be that a truth-theory, interpreted as realist, does not everywhere adequately answer this question. But his complaint is not that an incomplete account has been given of the predicates which the theory treats as semantically unstructured. In fact he will have no objection to the part of the theory dealing with such expressions unless assigned verification-transcendent satisfactionconditions; when it will concern not what the theory leaves unsaid but what it purports to state.

To avoid misunderstanding, I am not here disputing that

there is such a thing as semantic analysis, very possibly correctly conceived as concerned with the elucidation of criteria, and capable of achieving results of importance.4 (Actually, the methodology of such an investigation seems unclear.5) What I am suggesting is that a complete truth-theory for a language, if it is properly seen as a theory of meaning6 at all, is a complete theory of meaning too. Nothing further remains to be done by way of characterising the essential knowledge of a master of the object-language. If the meaning of any declarative sentence is fixed by determining its truthconditions, then knowledge of the meaning of any such expression is knowledge of its truth-conditions; so to give an account of the truth-conditions of all such expressions in the language, based on their structure and the semantic properties of their constituents, is exhaustively to characterise both what the master knows and how he may be conceived as knowing it. Semantic analysis cannot supplement the theory as a programme for answering these questions. But Scruton evidently intends the project of analysis of primitive predicates (why does he not explicitly envisage its extension to singular terms, functional expressions and, crucially, quantifiers?) to contribute towards the question, in what does an understanding of these expressions consist? What space is left for such a contribution, if we have a theory which computes the truth-conditions of every declarative sentence containing such a predicate as a function of the satisfactionconditions which it explicitly associates with the predicate? The theory states, in a most economical fashion, what someone who understands the predicate knows.

What would foster the illusion that space remains for semantic analysis to make such a contribution is a muddle which has frustrated relevant criticism of Davidson's project from the outset: the idea that the base-clauses serve only to pair expressions in the object- and metalanguages, that they only prescribe coincidences in sense and do not make explicit what the object-language primitives mean. I hesitate to attribute exactly this muddle to Scruton; a hostile reader might think he detected it in the "mimsy" "borogove" passage.

Analysis, then, is not correctly conceived as completing

an answer to the questions to which a realist truth-theory, qua purported theory of meaning, addresses itself but answers only 'partially.' Precisely what sort of question it can answer if truth-theory bags "What is known by anyone who understands L?"—how exactly it can enlarge our understanding of understanding of L—seems to me still to need an account. All I am suggesting now is the following. It may be right to repudiate truth-theory as the model of a genuine theory of meaning. But Scruton is reluctant to do so. Given this reluctance, his conception of the *nature* of semantic analysis, = that it proceeds by the elucidation of criteria, seems not to be in tension with his conception of its place, = that it tells us what someone who understands the analysed expression essentially knows, only if the claim of truth-theory to answer the latter question passes without due acknowledgement. Otherwise, this crucial issue has to be faced: what is the relation between grasp of such criteria and knowledge of satisfaction-conditions as characterised by the truth-theory? If the theory really is a theory of meaning, the latter knowledge is presumably constitutive of understanding; but the latter knowledge is not reducible to the former if the predicate in question is not decidable but is associated with (inconclusive) criteria—e.g., 'is in pain' as applied to others; what part, then, does the former knowledge play? (Or, better, what part does the latter play—what is it?) Exactly here is the point at which the anti-realist's concern about the adequacy of a satisfaction-conditions conception of predicatemeaning originates. But Scruton, having failed to appreciate that for a truth-theory to treat certain of the object-language predicates as primitive is not for it to keep (even partial) silence about their sense, fails to reach this point.

None of this detracts from the interest of what Scruton has to say about criteria. But I shall not have space to pursue his suggestions. Rather I want to try to explain what, as it seems to me, the anti-realist charge essentially is. And subsequently I want to touch on four assumptions which Scruton makes, if I interpret him correctly, in the course of his discussion:

that truth-theory "despite its empiricist overtones, certainly ought to be considered a realist theory in Dummett's sense";

that truth-theory can provide an explanation of our 'intuitions' of logical validity; (especially, those intuitions which are called into question by the Intuitionists(!) and which, Scruton thinks, will inevitably be so by a more generalised anti-realism also);

that a theory of meaning ought to sanctify inferential custom;

that a generalised anti-realism is bound to be revisionary of our standard logical practices.

II

What exactly is the connexion between truth-conditions and declarative sentence meaning? Whatever it is, it has to be reconcilable with the fundamental insight that grasp of the sense of any expression resides in the capacity to use, and respond to its uses, correctly. Scruton sees no tension between this foundational element of Wittgenstein's later philosophy of language and an endorsement of realism: "What is it to understand or know the meaning of a sentence? On one interpretation of Davidson's account we might say this: a man understands a sentence if he uses it as part of a language and in conformity with whatever constraints are imposed by the truth-theory for that language. Thus the rules of truth will also provide an account of the speaker's understanding."

It is not implausible to suppose that knowledge of the use of a declarative sentence will generally involve knowledge of the circumstances under which it could be used to state something true; truth, we conceive, is in general a necessary condition for the correct assertoric use of these expressions. But, obviously, the rôle which we may here allowably assign to the concept of truth has to be a function of what may legitimately be counted as grasp of the circumstances under which a sentence would state something true. What is it to have such grasp, if it is to have the desired connexion with knowledge of use? Evidently it is unnecessary that someone be able to produce an articulate formulation of the sentence's truth-conditions in some further way; still less does he have to possess articulate knowledge of a truth-theory for his language, or be able to supply any kind of analysis of his understanding in the particular case. More important, the

ability to produce a correct account of the truth-conditions is also insufficient. Somebody might be able to do that while misunderstanding both the sentence and his account of its truth-conditions. What would show that such was the situation? Precisely his failure to use the sentence appropriately, in particular a tendency not to assent to its assertion in circumstances when its truth-conditions obtained and he was in a position to appreciate as much.

Knowledge of use is not essentially verbalisable knowledge. So if knowledge of declarative sentence meaning is to be knowledge of truth-conditions we should not construe the latter as essentially articulate. Rather it must be recognitional capacity: the ability to recognise, if appropriately placed, circumstances which do, or do not, fulfil the truth-conditions of a sentence and to be prepared accordingly to assent to, or withold assent to, its assertion. There is no hiatus between this ability and knowledge of the sentence's meaning; to attribute to someone the ability to recognise as such circumstances which do, or do not, fulfil the truth-conditions of a sentence—however problematic the criteria for such an attribution—is to attribute to him understanding of the sentence.

So much connexion between truth-conditions and meaning is, I imagine, acceptable to anyone. What is contentious is the converse connexion: is it acceptable that if someone understands a declarative sentence, he must possess a recognitional grasp of the circumstances under which it would be true? The difficulty is immediate: what if our standard conception of the truth-conditions of the sentence is such that if actualised, they would not, or need not, be recognisably so? Multifarious types of sentence are in this situation: unrestricted spatial or temporal generalisations, many subjunctive conditionals, descriptions of the remote past, hypotheses about the mental life of others or of animals. If it is to be insisted that knowledge of truth-conditions has to be a recognitional capacity, then in cases like these there is not, or need not, be anything in which this alleged knowledge can consist. We thus have a dilemma: we can retain in such cases the connexion between understanding and knowledge of truth-conditions only at the cost

of attributing to ourselves a capacity to know what certain circumstances would be like which reduces to no capacity of recognition; what, in that case, of the connexion between understanding and knowledge of use? Or we can reject the suggestion that the concept of truth plays the central rôle in our knowledge of the meanings of sentences of these sorts.

The latter is the anti-realist course. Grasp of the sense of a sentence cannot be displayed in response to unrecognisable conditions; nor, if we take seriously the connexion between meaning and use, can such grasp go any further than its capacity to be displayed. But it cannot be supposed a mere illusion that we understand sentences of this kind. For there is a communal capacity of discrimination between correct and incorrect assertoric uses of them. So the right account is rather that our understanding of sentences whose truthconditions we picture to ourselves as (possibly) verificationtranscendent—because their 'verification' would require an infinitistic extension of capacities we possess, or possession of capacities which we altogether lack—is to be dislocated from such pictures of the 'circumstances' under which they would be true; instead it must have to do with more mundane circumstances which we can actually (or at least in principle)⁷ recognise to obtain.

What sort of circumstances will these be? In examples like those cited they will typically consist in the existence of what we customarily regard as good but inconclusive evidence of such sentences' truth. In other cases, where conclusive verification is possible, it will continue to be admissible to think of understanding as consisting in knowledge of truth-conditions; for this knowledge is here recognitional. But the concept of truth surrenders two traditional aspects of its objectivity: for something to be fact it will be both necessary (no transcendence) and sufficient (no scepticism) that we can achieve a verification, by ordinary criteria, that it is so. In pure mathematics, for example, we banish the notion that theses may be true in virtue of the characteristics of hard, infinitistic conceptual structures which we finite beings can determine, if at all, only indirectly, albeit conclusively, by proof. Proof will constitute such sentences' truth.

Scruton suggests a realist will argue that such a notion is not correctly interpreted as one of truth at all—that all objectivity is lost—and hints at Kantian reasons for thinking so, of which a more explicit account would have been welcome. As it stands, the contrast between "world-oriented" and "speaker-oriented" notions of truth is not what is in play. Anti-realism is not a species of idealism. We do not ordinarily think of those aspects of reality which we are able conclusively to determine as any less of the world. All that is being suggested here is that such aspects constitute the world—or, at least, those of its features to which we can give intelligible expression.

In general, we have to distinguish at least four categories of sentence to which we should ordinarily apply the notion of truth: those which are effectively decidable; those whose truth-conditions we so conceive that, if true, they must (at least in principle) be recognisably true, though the corresponding connexion between falsity and falsifiability fails; those whose truth we do not conceive as requiring their verifiability, though we are not in a position to rule out the possibility of verification, (Fermat's "theorem", e.g., or any ascription of a dispositional property whose circumstances of revelation we cannot effectively bring about but can recognise if they occur); and those whose verification is always beyond us. For a realist, these differences are quite inconsequential for the notion of understanding; to know the meaning of a sentence of any of these sorts is to know that it is true under certain specified circumstances and false under any others. But take any example in the fourth category; what in such a case is supposed to constitute this alleged knowledge? The only apparent candidate is: a capacity to formulate a conventionally correct account of just those circumstances. But this capacity, as noted, is two-way independent of the ability to use the sentence correctly in response to one's experience. If the latter ability is essential to an understanding of the sentence, the fact remains that there can be no experience of the sentence's truth. If linguistic understanding, then, is conceived as essentially a practical skill, we have no alternative but to conclude in such cases either that there is nothing for knowledge of truth-conditions

to be or that it resides in an ability which is neither necessary nor sufficient for grasp of the sense of the sentence in question. Either way, we let go the fixation that it is in terms of knowledge of truth-conditions that the theory of meaning should depict our understanding of declarative sentences.

If we seek a general account of what an understanding of any of these four types of sentence amounts to, the only plausible strategy is to have it conform to the slogan: grasp of the sense of a declarative sentence is an operational grasp of the distinction between states of information which justify its assertoric use and states of information which do not. The achievement of a verification is one state of the former kind. So where verification is possible, it is quite unexceptionable to think of knowledge of truth-conditions, of this non-transcendent sort, as playing an essential rôle in grasp of meaning. But such knowledge will not be the whole of understanding in any case where other kinds of informational state are conceived as criterial justification for the assertion of the sentence—where mastery of its use requires the ability to recognise the relevance of such states. And in cases of the fourth type, knowledge of truth-conditions has no part to play.

On Scruton's conception of the matter, it is true, a realist theory of meaning, in the form of a theory of truth, nowhere directly attributes to those whose linguistic practice it seeks to describe knowledge of truth-conditions as such. Rather, for the theory to be a theory of their actual language is for them to be disposed to use declarative sentences "in conformity with whatever constraints are imposed" by the theory, *i.e.*, by its T-theorems. So their practice is, as it were, described obliquely. Their understanding *e.g.*, of sentences of the fourth type does indeed consist in knowledge of their use; but that they accept just the states of information as justifying the assertion of these sentences which they do accept is to be explained in terms of an underlying, verification-transcendent notion of truth.

It is important to see that this is a vacuous refinement. In order for the theory to be testable, we at least—its devisors—have to be able to recognise just what constraints on the correct assertoric use of a sentence are imposed by assigning to it such-

and-such transcendent truth-conditions, Scruton provides no clue what the nature of this 'constraint' might be, how such an assignment enjoins a certain pattern of use. But the main point is that unless we can credit ourselves with an independent grasp of the truth-conditions in question, there is no route through the assignment to an account of the circumstances under which we can expect users of the object-language to count the assertion of the sentence as justified. But then the problem remains of giving practical content to this alleged grasp; and practical content it must be given, distinct from that associated with grasp of the states of information justifying the assertion of the sentence—for this is what it is supposed to explain, to provide a unifying principle for before it can meaningfully be claimed that only by appeal to such a notion can the use of the sentence be characterised. The fact is, however, that no account is in sight of what grasp of transcendent truth-conditions is which can play this explanatory rôle. So the suspicion remains that realist truththeory passes for a theory of meaning only because we, as it were, ignore the reference to truth and regard the Ttheorems simply as identifying what assertions the quoted expressions are used to effect, testing them by reference to our grasp of the states of information which warrant those assertions. And the charge remains unanswered that as an attempted theory of linguistic practice, the realist version proceeds in terms of the wrong central notion.

III

Part of the motivation for realism surely is the idea that unless we invoke the notion of truth, it will be impossible to explain the *variety* of states of information which may be taken to justify the assertion of a particular sentence. How is it that a variety of proofs may be possible of a mathematical conjecture, or that another may display his social unease in a variety of ways? Do we not require an account of the sense of a sentence which makes clear the relevance to it of each of varying sorts of state of information which are deemed to justify its assertion?

Consider any contingent generalisation: for all x, Fx. It is

natural to suppose that the sense of 'all' is invariant with respect to the size of the domain of quantification. But the 'assertibility-conditions' of such generalisations seem not to be so. If the domain is small, and we possess a criterion for its having been exhaustively examined, then the optimum state of information is that consequent on such an examination. If it is large, we shall probably rely on indirect, argumentative grounds, even if we possess such a criterion. If it is infinite, we have no recourse but to such grounds; likewise in any case, irrespective of size, if we have no way of knowing that the whole domain has been checked. How can we make intelligible to ourselves the continuity in sense of 'all' through this variety of cases unless there is a uniform explanation appropriate for each of them? And how can this be given by reference to assertibility-conditions when their character varies among the cases? To invoke a uniform notion of truth, it might be thought, will supply this continuity.

How, exactly? The picture, I think, would have to be this: we are able to recognise, inductively I suppose, that the indirect type of ground is a good guide to the truth or falsity of decidable cases. We then export an analogous notion of truth to all cases; and though it now becomes verification-transcendent in some of them, it is only because we have such an analogy in the background that we can make intelligible the full range of criteria which we actually employ.

The picture, and its motivation, are suspect on four counts. First, we have to face the possibility that our impression of continuity of sense may be a product of the absorption into our preconceptions about our language of inadmissible (realist) imagery; the impression is therefore liable to reassessment in the light of a better philosophical perspective on the nature of linguistic understanding. Second, and more important, it is far from clear that it is any part of the brief of a theorist of meaning to make intelligible, in the sense appealed to, a variety in the assertibility-conditions of a particular sort of sentence. His task is to characterise what a master of the object-language essentially knows. If there is a variety of this kind, a master will know of it: so the

theory must characterise it. But it does not have to explain it, if that is to mean: provide a something in virtue of which the variety can be seen as unified in source. There is such a thing, I suppose, as our all recognising the appropriateness of a hitherto unenvisaged sort of state of information as justification for a particular assertion—as opposed e.g., to our all being disposed to accept a certain analogical extension of its assertibility-conditions. (Probably the distinction is highly problematic.) So an adequate theory of meaning for our language will have to associate with that sentence such so far unexploited grounds of assertion. But there is no reason to think that only a realist theory will be able to cope with this sort of problem; if ever it seems needed, better to reexamine the idea that our admission of the new assertiongrounds is a matter of recognition. Third, what is it to export an analogous notion of truth from decidable cases to the others? It had better be more than an assimilation of their use—their proof-theoretic liaisons and assertibilityconditions; for it is this assimilation which it is invoked to 'make intelligible'. The analogy is somehow to mediate the assimilation. But it can only do so if we can get some independent purchase on the verification-transcendent analogue. This is what we lack. The truth is that the 'analogy' contains no explanation—it is a veiled stipulation: do not worry about the apparent disharmony between the assertion-grounds and classical proof-theoretic properties of e.g., infinitistic generalisations, but pretend you have an underlying concept from which both can be seen to flow. Fourth, the idea that 'all' is univocal through the various cases actually gets quite enough support from the preservation of certain absolutely central logical properties, e.g., the Instantiation rule, by an anti-realist view of its meaning.

This is only one example. But the first two points are general, and the third is generalisable.

IV

In the exposition which I am trying to develop, the case for anti-realism is independent of considerations about how knowledge of meaning can be acquired; it has to do rather with how it can be manifested—with the character of the data which it will be the task of the theory of meaning to codify. Consider an analogous task: that of devising a theory of a game in the same sense of 'theory'. That is, we want a systematic representation of the knowledge how to play the game. Suppose the case is that of a two-person board game, with different pieces associated with different powers, etc. Knowledge how to play involves knowledge—not necessarily explicit, propositional knowledge—of two sorts: knowledge of the initial configuration, of when one is entitled to move, and of what moves are admissable in any particular situation; and knowledge of when someone—and who—has won, and that the aim is to win. To be able to play the game is to have just these discriminative abilities and overriding intention; a theory of the game is exactly a complete, explicit specification of what anyone who can play the game implicitly knows.

Suppose we come across a tribe whose language we do not understand and who play a game much akin to chess. Our task is to construct a theory of their game, "tribe-chess", purely from observation of their play. Our observations suggest that the theories of chess and tribe-chess should coincide with respect to the first category of information above. But winning is different. Games of tribe-chess are never played to a chess conclusion. Instead a system of arbitration seems to operate, each player apparently having the right on making a move to call on a referee—a revered class—to assess the resulting position. Sometimes the referee awards the game to the plaintiff; sometimes he bids play continue; sometimes he awards a draw (e.g., he holds both Kings aloft). All this is our interpretation, of course. Suppose it very well supported by the tribesmen's behaviour.

To win in tribe-chess, then, is to get the verdict on going to arbitration. But that statement is no good for the purpose of our theory. Just to know that, plus all the first-category information, is not yet to know how to try to win. The players have to know what kind of position can be expected to elicit a favourable verdict.

Suppose that matters seem straightforward. The referees

award wins only when our experts agree that the plaintiff has indeed secured an advantage which, on best play, is likely to secure him a chess win. *Mutatis mutandis* for the verdicts, 'draw' and 'continue'. Then it might seem we should complete the section on winning thus: a player wins in tribechess just in case he achieves a position from which he can, by best play, win in chess.⁸ Correspondingly for a draw. The rôle of the referees is just to assess configurations for these features.

The trouble with this account is that it attributes to tribechess a gratuitous theoretic flaw: to have won, as so characterised, does not entail that it can be recognised that one has. So it cannot be excluded that people may play through tribe-chess wins without it being possible for them, or the referee to realise as much. In chess, in contrast, we may overlook that we can win from a particular position; but it is recognisable if we have won. But there is an obvious remedy: characterise the players as aiming at a position of which it can be recognised that best play will eventually secure them a chess win. This hypothesis explains the same facts while avoiding the flaw.

Its main advantage, however, is philosophical. If we are attempting to construct a systematic theory of a rulestructured, goal-directed activity, we have to ascribe feasible intentions to the participants—goals such that if achieved, the participants will be able to recognise it. The ground for saying so is simply that any recognition-transcendent residue in the attributed goals—the difference e.g., between the original and emended hypotheses about winning in tribechess—will be theoretical slack, void of observational warrant. None of our observations can possibly suggest that the tribechess players are aiming to win irrespective of whether anyone can see that they have. If our theory of their practice is to be an empirical theory, the only objectives which we have any business attributing to them must be such that their behaviour, as it unfolds in the practice of the game, can supply grounds for the attribution.

The point, then, has nothing to do with armchair speculation about how an understanding of the practice can be acquired. But there is no harm in putting it like this: a

practice involving recognition-transcendent objectives is not as such a *communicable* practice; for it will not matter if someone misunderstands an objective of this sort providing he grasps aright the circumstances under which the claim that it is realised may legitimately be made. Thus it is not that we *can* only learn the nature of certain goals by experience of what it is like for them to have been achieved; rather, it is sense to think of someone as aiming at a particular goal only if it is sense to think that he has learned its nature *somehow*, *i.e.*, can provide evidence that he understands it.

The point of the example resides in the familiar analogy¹⁰ between winning and truth. An understanding that one is to aim to win/make true assertions is fundamental to an undergame/assertoric discourse. of the emendation was: aim at asserting sentences in accordance with the constraints consequent upon a correct truthdefinition for them. But truth-theory is to be an empirical theory; its construction is e.g., the end of a programme of radical translation. So if the emendation is not to introduce theoretical slack, the meeting of the constraints in question must in any particular case always be explained as a situation which, if actual, can be recognised to be so—by the theorists at least. It follows that it can never consist in the realisation of verification-transcendent truth-conditions; more, that a picture of what it is for such conditions to obtain is no essential part of a language-master's equipment—for the evidence cannot require us to characterise his objectives in terms of a notion which it can afford us no grounds to suppose he possesses. Truth, then, is unsuited to serve as the central notion in an empirical theory of meaning. The central notion must register a non-transcendent objective. for whose possession by the object-language community there can be direct, observational evidence. So we must describe ourselves, and others, as aiming at 'warranted assertion', where this catchphrase signals our ambition to construct a theory for whose lowest-level theorems—the analogues of the old T-theorems—there can be the most direct evidential support.

On this view, there is no alternative to the conclusion that

we habitually misrepresent to ourselves the character of our understanding of certain sentences. For it cannot be other than as such a theory would characterise it. We conceive, for example, of infinitistic contingent generalisations as, if true, being so in virtue of a tailored infinitistic fact, essentially inaccessible to us and of which we can only detect the symptoms; when the truth is merely that we have so fixed the use of these sentences that the optimum state of information justifying their assertion always falls short of verification—that we are always prepared to envisage the enlargement of such a state into one which warrants their denial.

It is futile to refer the demand for evidence of our possession of a verification-transcendent notion of truth for such sentences back to our habitual application to them of principles of classical logic. Are we to surrender the view that the validity of such principles ought to be a function of the senses of the logical constants—that Excluded Middle, e.g., is valid, if at all, in virtue of the senses of 'or' and 'not' as characterised absolutely generally by a satisfactory theory of meaning (so one which does not employ a recognitiontranscendent central notion) and the general form of explanation of declarative sentence meaning which it offers? If logic is to be so answerable, the behaviour in question is evidence not of the currency of a realist notion of truth, but that a lay-philosophical misconception has become more than a picture and has been enshrined in linguistic practice. If logic is not to be so answerable, the behaviour in question shows nothing about our understanding of the sentences to which it is applied. (More of this shortly.)

Such, then, is how I interpret the motivation for a globally anti-realist philosophy of language. Whatever is thought of it, it is clear that the complaint made against realism could not be appeased by any kind of supplement to a realist truth-theory. It is only in a facetious sense that we can say that there may be *more* information to be given about the meaning of a particular declarative sentence than is captured by its T-theorem in a 'correct' realist truth-theory; for unless the theorem associates the truth of the sentence with recognisable conditions, it supplies *no* constraints on its correct use, and so fails to characterise its sense altogether.

v

The scope of the foregoing considerations is no wider than the question, in what does an understanding of a particular declarative sentence consist. We have been concerned only with the desirable output of a theory of meaning. Doubts remain concerning the mechanics of a theory which is to have such an output. How are we to treat sentences containing unasserted sentential parts? Surely the fear that P, for example, cannot in general be plausibly construed as the fear that P is justifiably assertible; what is feared is that P is true. Similarly, surely the antecedents of conditionals must be taken as hypotheses not of warranted assertibility but of truth. I may very well know that a conditional which I believe, e.g., about the events at Thermopylae, has an antecedent for which there is no evidence whatever. The irrelevance of this knowledge to my semantic intention in asserting it is attested by its provision of no motive for using the subjunctive mood.

The doubt is exactly whether a systematic anti-realist theory of meaning is possible. I could not allay it here, even if I knew how. But I want to scotch one source of it. It is inescapable that such a theory ought generally to construe the senses of declarative compounds as a function of the assertibility-conditions of their constituents. But this does not require that we treat the unasserted constituents as interchangeable with statements of their own warranted assertibility. We are not allowed in general to do so, for a simple reason: they are not the same statement. 'P is justifiably assertible (in the present state of information)' is, if true, always in principle decidably so; whereas there may be no notion of verification for P, and, if there is, the former may still be verified in circumstances falling short of it.

But how, in that case, are we to construe unasserted occurrences of P in compounds? In many cases, at least, by adapting the work of the Intuitionists. Consider their account of mathematical conditionals:

' $P \rightarrow Q$ ' is proved just in case we have a construction, C, of which we can recognise that, had we a proof of P, we could use C to transform it into a proof of Q.

A natural generalisation is:

A state of information justifies our assertion of 'if P, then Q' just in case we can recognise that its enlargement into a state justifying the assertion of P would *eo ipso* transform it into a state justifying the assertion of Q.

Such an account would provide a treatment of a large class of conditionals without either invoking a realist notion of truth or requiring us to identify their antecedents with hypotheses of warranted assertibility.

VI

Scruton writes: "A theory of truth should be able to lead us to an account of validity. Only then will it have embraced all those aspects of linguistic behaviour which can provide evidence for a theory of meaning. But, as it happens, there seems to be no prospect of accounting for those inferences recognised by normal speakers as valid or invalid without assuming a transcendent conception of truth." This idea has some plausibility; for we tend to think of our recognition of validity, and necessity in general, as an application of the very discriminations of structure and semantic rôle which it is the task of a theory of meaning to characterise. This is just an adaptation of the old idea, "true purely in virtue of meaning".

But how exactly is a truth-theory to account for validity? Presumably, if P expresses a necessary truth, we want to be able to prove a theorem, + P is true, from the clauses of the theory. (For a valid principle of inference, 'P' will be a suitable corresponding conditional.) Obviously, however, whether or not we can do so depends on the proof-theory in which the theory of truth is embedded. Consider a simple example. We are to construct a truth-theory in English for a (fragment of a) language consisting of a finite number of semantically unstructured sentences whose rôle is to record the colour of presented patches, and any sentences accessible from these by finitely many applications of the unary connective, 'nee', and the binary connective, 'aurt'. Thus we have the base clauses:

'hab ruch' is true = it is red,

'hab vereid' is true \equiv it is green, etc.,

and the recursive clauses:

P 'aurt' Q is true \equiv (P is true) \vee (Q is true), 'nee' P is true $\equiv \sim$ (P is true)

Suppose that speakers of this tongue accept a Double Negative Elimination rule for these sentences. Can we elucidate their 'intuition'? We are asking in effect, can we derive the theorem: \vdash 'nee' 'nee' P is true \supset P is true? The answer is, trivially, 'yes' if we have: $\sim \sim$ P \vdash P as a meta-linguistic rule of inference; otherwise, 'no'. So 'no' if we have only the apparatus necessary for deriving the Tarski biconditionals.

A pure truth-theory, then—one which contains only that apparatus—will in general be quite impotent to get to grips with questions of validity in the object language. Do we want to sanctify this aspect of the speakers' practice or fault it? It is a question to be decided by informal philosophical reflection on the semantics of vague expressions. Depending on the results of that reflection, we shall want to tailor our meta-linguistic rules so as to yield, or leave inaccessible, the theorem in question. But the resulting truth-theory will merely embody an insight achieved by quite different methods. There is no question of it leading us to that insight.¹¹

In one sense, naturally, we can 'account' for the speakers' habitual acceptance of any inferential pattern just by tailoring our theory so that it yields the relevant theorem. But this cannot be the sense which Scruton had in mind; for we could so account for our acceptance of classical logic without any appeal to a verification-transcendent notion of truth, but merely by mindlessly couching a truth-theory for our language in a classical proof-theory. A theory of meaning which is to meet Scruton's requirement must incorporate some informal philosophy. So there is a potential tension between that requirement and the idea that the formal truth-theoretic part must square with as wide a field of evidence as possible. There is no question of our having to

give equal weight to all aspects of the speakers' regular inferential practice as evidence for or against the theory; rather, in proportion as our confidence in the theory grows, we shall take the capacity of their practice, so interpreted, to meet philosophical requirements as the test of its correctness. Scruton may be right in thinking that, at the informal level, it is only by appeal to a realist notion of truth that we can get a general exegesis of the validity of classical principles. But in calling for a substantial account of validity, he puts the intelligibility of this notion beyond support by appeal to the character of our habitual practices. It stands or falls under philosophical scrutiny.

A pure truth-theory is thus not yet a realist truth-theory. Does it have to be interpreted as a theory of *truth* at all? Does anything that happens in such a theory prevent our taking it as a theory of warranted assertibility?

Scruton contests that we could so interpret the sort of straightforward negation clause illustrated. The point, if I interpret him right, is that we cannot suppose that 'not P' is justifiably assertible just in case it is not the case that P is; for the latter may be true in a state of information which does not warrant the *denial* of P.

Convention T requires that any sentence comprising the right-hand of a Tarski biconditional be a translation of the quoted sentence to the left. Evidently, therefore, to interpret a pure truth-theory meeting this constraint as a theory of assertibility requires that we take these biconditionals as something other than material equivalences. That is, in any correct biconditional,

P is justifiably assertible $\equiv \phi$,

 ϕ cannot be synonymous with P in any case where 'P is justifiably assertible' may be verified in circumstances falling short of a verification of P. The obvious strategy is to adapt the generalised intuitionistic account of the conditional, sketched earlier. We read the Tarski biconditionals as pairs of conditionals whose assertibility-conditions are as then explained. Thereby, I surmise, it will be possible to reconcile the output of a pure truth-theory, satisfying Convention T, with its interpretation as a theory of assertibility. For,

plausibly, to be justified in asserting that P is justifiably assertible is to be justified in making an assertoric use of any sentence synonymous with P.

This does not yet make clear how we can interpret in terms of assertibility both occurrences of 'is T' in a straightforward negation clause:

'not' P is
$$T \leftrightarrow \sim (P \text{ is } T)$$
.

But this is only a schema for arriving at an account of the assertibility-conditions of 'not'P, and not yet a final deliverance of them. The theory will, it is to be hoped, provide a T-theorem: P is $T \leftrightarrow \phi$. Assuming, then, that our proof-theory contains the meta-rule:

$$A \leftrightarrow B + \sim A \leftrightarrow \sim B$$
,

the final deliverance is:

'not'P is
$$T \leftrightarrow \sim \phi$$
,

i.e., any state of information justifying the assertion that 'not'P is justifiably assertible justifies the denial of ϕ , and conversely. Which, if ϕ is a translation of P, comes to what we want.

Any pure truth-theory will contain the needed meta-rule. And it is easily seen to be justified in terms of the most natural generalisation of the Intuitionists' account of mathematical negation:

the negation of a sentence is proved just in case we have reduced to absurdity the supposition that a construction constituting a proof of that sentence can be achieved.

Namely: a state of information justifies the assertion of the negation of a sentence just in case it justifies the assertion that an (overall) state of information justifying the assertion of that sentence cannot be achieved. On this account, if P and Q have the same assertibility-conditions, so do their negations.

If an anti-realist cannot accept the straightforward recursions for the logical constants given in a pure truth-theory, reinterpreted along the lines illustrated, I have to confess that I have not been able to detect why not. Indeed, the possibility suggests itself that he may simply take over the

legacy of the approach to structural problems which those working within a truth-theoretic framework have bestowed, confident that their results—so long as not achieved by essential recourse to classical concepts and methods in regions where he will contest their legitimacy—will survive reinterpretation in his terms. Anyone who feels that there is much to be said for Davidson's approach, and something to be said for the earlier part of this paper, ought to hope that this is so.

It would, at any rate, be easier to understand the rôle of a programme of analysis of the kind which Scruton envisages. When a truth-theory is interpreted as a theory of assertibility, its T-theorem for any particular object-language sentence, P, characterises the states of information which justify assertoric use of P as those which justify a particular assertion, metalinguistically expressed. Plausibly, this is to characterise what assertion is effected by P-which is what anyone who understands it essentially knows—and, as before, the mode of deliverance of the relevant T-theorem will suggest a model of how his mastery of the language bestows this knowledge. But there may still be such a thing as further articulating what in any particular case this knowledge consists in. The trouble with Scruton's account was precisely that it is impossible to see recognition-transcendent knowledge as consisting in knowledge of criteria. Now, however, there is room for analysis, conceived as the elucidation of criteria, to be of the very knowledge characterised by the formal theory. Its goal will be e.g., to explain the verificationconditions of 'P is justifiably assertible in the present state of information'.

VII

I have tried to give reasons for thinking that it is not necessarily outrageous if a theory of meaning proves revisionary of inferential practice, if its formal part contains no acknowledgement of certain aspects of inferential custom in the described community. We cannot be required to count everything as evidence for or against the theory if we conceive that it is to be *deeply* explanatory of linguistic practice, in the sense invited by the idea that the theory should elucidate the 'flow' of validity, and necessity in general, from semantic

features. But a quite different view is possible, far removed from realism. According to it, the substance to the notion that we recognise validity, and necessity in general, by apprehending semantic features is merely that we take an obdurate non-recognition as a criterion for a misapprehension. "He cannot understand the sentence as we do." But there need be no possibility of an illuminating explanation of how necessity is a product of semantic properties in any particular case. Some principles may simply be accepted as constitutive of the meanings of the expressions involved. It may simply not be possible to trace the validity of such principles back to a source in a general account, e.g., of the logical constants, which balances the ideals of accord with object-language practice and philosophical respectability. It may be, for example, that it would prove impossible for an anti-realist visitor from space, essaying a theory of meaning for English, to provide a general account of 'not' which explained (as e.g., the generalised intuitionistic account, above, explains the principle, $P \leftrightarrow Q + \sim P \leftrightarrow \sim Q$) our general acceptance of Double Negation Elimination, save at the cost of not explaining other central principles. But it may also be that we take a failure to grasp Double Negation Elimination as a criterion of muddle about the effect of negating a sentence twice. In that case, rather than hold our acceptance of the principle to be suspect, our visitor should require his theory somehow to record that it is accepted.

On this view, a theory of meaning may afford grounds for attributing false empirical beliefs to speakers of the studied language, but it cannot convict them of inferential malpractice. For the logical principles which they accept are simply constitutive of the concepts involved; necessary statements *determine* the meanings which they are 'true purely in virtue of'.

There is not obvious any conflict of this idea with the general conception that an understanding of any declarative sentence is constituted by the ability to discriminate between states of information which justify its assertion and states of information which do not. Its conflict is rather with an assumption implicit in the idea that this conception is bound to prove revisionary of classical logic in a wide class of cases. Consider the key example of Excluded Middle. Why does

this seem unassailable from a realist point of view? For a realist, the sense of any declarative sentence is determined by associating with it certain necessary and sufficient conditions of truth. In any other circumstances the claim that the sentence is not true, = what is expressed by its negation, will be correct. So Excluded Middle follows by an appeal to the distributivity of truth over disjunction, i.e., the requirement that it is both necessary and sufficient for the truth of a disjunction that one of the disjuncts be true. On a (generalised) intuitionistic account of the logical constants, the distributivity of the central notion is retained. Thus a state of information justifies the assertion of a disjunction just in case it justifies, or can be recognised to be capable of effective enlargement into a state which justifies, the assertion of one of the disjuncts. A valid disjunction is one whose assertion is so justified in any state of information. So if negation is interpreted in the generalised intuitionistic way sketched above, it is apparent that many examples of Excluded Middle are not now valid. That is, for a wide variety of statements, S, states of information are conceivable which justify neither the assertion of S nor the assertion that a state of information justifying the assertion of S cannot be achieved, and such that no effective way is apparent of enlarging them into a state justifying one of those two assertions.

One assumption made here is that an anti-realist should go for such an account of negation. Another is the distributivity of the central notion over disjunction (whose rejection would seem to threaten other principles; e.g., Modus Tollendo Ponens). But more fundamental, and common to both accounts, is the idea that the validity of Excluded Middle is to be assessed by application of general explanations of disjunction and negation. And this is just a reflection of our tendency to think of the necessity of many sentences as originating in, and to be explained in terms of, their structure and the pre-established semantic properties of their constituents.

The alternative view rejects this assumption. It is the position of the later Wittgenstein. It is evident that if there is to be a theory of meaning at all, all the sympathy of the Wittgenstein of the *Investigations* and *Remarks on the*

Foundations of Mathematics would be with the anti-realist project. Yet he took an explicitly anti-revisionist view of the philosophy of language.12 Ît is plausible that at least part of the explanation of this was his idea that logic and mathematics should be seen as 'antecedent' to questions of truth13 (or justifiable assertibility). The principles of inference which we employ are not to be seen as answerable e.g., to the senses of the logical constants, and so in principle capable of revision in the light of a theory which correctly characterises those senses. Rather they are antecedent to all such questions, themselves entering into the determination assertibility-conditions of the potential infinity of contingent sentences whose construction the language allows; for the assertion of any such sentence may be justified on the basis of inference. They are among the rules of the 'languagegame'; and a systematic description of the practice should record as much. Excluded Middle is not answerable to a general account of disjunction and negation; rather, if its acceptance is indeed deeply embedded in linguistic practice, that it is so should be part of such an account.

Quite how the anti-realist space visitor, radically translating our language, should implement this idea is another matter. If he just adds the axiom: 'P or not P' is unrestrictedly justifiably assertible, how is he to avoid the transition, via the recursions of his theory, to something equivalent to: $+A \lor \sim A$, which is what he rejects? Perhaps he should regard the quoted part of the axiom as uninterpreted, as not subject to treatment in terms of the clauses for 'or' and 'not'; certainly its rôle is to supplement the information which those clauses give.

Our reluctance to accept these ideas needs little support from their programmatic obscurity; it is just our reluctance to accept the extreme conventionalism about necessity which Wittgenstein later came to hold. Two intuitive ideas militate against its acceptance: the idea that recognition of necessity generally is recognition in the light of understanding, that the necessity of a sentence—save in the case of an explicit convention—will be a product of its structure and the independently assigned semantic roles of its constituents; and the idea that principles of inference have a responsi-

bility to the truth- (or assertibility-) status of the contingent sentences which they will enable us to link as premisses and conclusions in practical inferential contexts. Wittgenstein disputed that necessity has an epistemology, and rejected the idea that we could *fail* in the latter responsibility.

I think it is fair to say that, if his reasons for doing so were bad, we have yet to earn the right to be sure of it. But if this extreme conventionalism were incorrect, that would not yet be for it to be evident that a fully anti-realist theory of meaning is bound to be revisionary of certain of our traditional logical habits. At any rate, someone who thinks it is so owes us an explanation of why, if the distinction can indeed be made good between explicit conventions and those sentences whose necessity is consequent upon pre-established semantic properties of their constituents, those generally accepted classical principles whose validity proves inaccessible in terms of the anti-realist account should not be regarded as falling within the former class.

NOTES

- ¹ D. Davidson, "Truth and Meaning", in Davis, Hockney, Wilson, Eds., Philosophical Logic (Reidel 1969), page 7.
- ² Neither title is particularly happy. Realism may be attacked from all sorts of standpoint; and verification need not be the central notion in an antirealist theory of meaning. But it is hard to think of better ones; and we are stuck with 'anti-realism' now anyway.
 - 3 "Truth and Meaning", loc. cit., page 13.
- 4 One might have supposed that a central task of analysis would be to determine the class of sentences to which the theory of truth is applicable. It struck me as curious that Davidson should have been pleased to side-step e.g., questions to do with the character of evaluative discourse. A central point of controversy has always been exactly whether the notion of truth is properly applicable to "Bardot is good". It may be that Scruton's remarks in the last section of his paper show the naivete of this.
- ⁵ I do not share Scruton's confidence that it will be straightforward to draw the distinction between criteria and evidence from an observer's point of view. (A different problem is that the idea that we can know reflectively what criteria we use appears, when natural assumptions are made about how exactly this knowledge can be achieved, to lead to paradoxes which threaten the whole programme of a systematic description of language use. See M. A. E. Dummett, "Wang's Paradox", C. J. G. Wright, "On the Coherence of Vague Predicates", both in Synthese 30, (1975), and Wright, "Language-Mastery and the Sorites Paradox", in Evans, McDowell, Eds., Truth and Meaning, (Oxon. 1976)).
- ⁶ As remarked, it remains to construct a theory of commands, wishes, etc. I am assuming the propriety of seeing this task as supplementary to that of constructing a theory of meaning in the sense sketched at the beginning.

- ⁷ By 'in principle' possibilities I intend, roughly: feats in practice possible for a being with the same range of abilities as we, but possessing them to greater though still finite degree. Whether anything turns on this distinction, from the point of view of a prospective anti-realist, is an unsolved, and fundamental, question.
- ⁸ In a fully explicit theory, of course, we should explain away the reference to chess.
- ⁹ For example, it is not known, so far as I am aware, whether White cannot always win if he knows how.
- ¹⁰ Cf. Wittgenstein, Remarks on the Foundations of Mathematics, Appendix I, 1-6. Dummett, "Truth", Proc. Aristot. Soc., 1958.
- ¹¹ For pursuit of related ideas, see M. G. Evans, "Logical Form and Semantic Structure" in Evans, McDowell, Eds., op. cit.
- 12 Cf. Investigations, I, 124; and Remarks on the Foundations of Mathematics, IV, 52.
- ¹³ Cf. Remarks on the Foundations of Mathematics, I, 155. See also G. E. Moore, "Wittgenstein's Lectures of 1930-33" in G. E. Moore, Philosophical Papers (Allen and Unwin, 1959).