

THE ANALYTIC-SYNTHETIC DISTINCTION

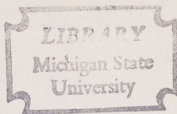
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DALE KENT

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THE ANALYTIC-SYNTHETIC DISTINCTION

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ABSTRACT

THE ANALYTIC-SYNTHETIC DISTINCTION

By

Dale Kent

The primary purpose of this work is to distinguish from each other, as clearly as possible, the various arguments which have been, or could be, made for and against the analytic-synthetic distinction.

The arguments against the distinction which are considered in this work do not presume the truth or falsity of Quine's thesis of the indeterminacy of translation, although some of these arguments can be viewed as arguments for Quine's thesis.

Arguments are given for the claims that: 1. The notion of analyticity has no justificatory power; 2. Analyticity has no explanatory power; 3. There are no analytic sentences; 4. The notions of meaning and synonymy are not needed to describe successful translation and communication; 5. The notion of analyticity is not clear enough.

Various defenses of the analytic-synthetic distinction are examined and found to be wanting.

An important sense of 'obscure' is defined, in the light of which the claim that 'analytic' is obscure is examined. The attempt to explain away the obscurity of 'analytic' in terms of the indeterminacy of other expressions

is seen to involve the appeal to the notion of intensional obscurity, a notion which is as problematic as analyticity.

The claim that the notion of analyticity has utility in an ideal language is seen to depend on a confusion between intrasubjective and intersubjective synonymy.

Carnap's empirical criterion of synonymy is examined and found to be defective on the grounds that it is subject to a partial circularity and on the grounds that it doesn't provide a clarification of the notion of intralinguistic synonymy.

One of Grice and Strawson's criteria of synonymy is examined and found to indirectly presuppose the notion of meaning and sameness of meaning, and therewith of analyticity.

The notions of analyticity by fiat and truth by convention are shown to be incapable of guaranteeing analyticity and of answering the criticism that analyticity has neither explanatory nor justificatory power.

Quine's response to Grice and Strawson's proposal to define synonymy along the lines of the verifiability theory of meaning is seen to involve a misinterpretation of this proposal. However, their proposal does not seem to hold the promise of answering the criticism that analyticity has neither explanatory nor justificatory power and the criticism that there are no analytic sentences.

Two kinds of paradigm case arguments are distinguished. It is shown that neither of them has the power to prove that apparently analytic sentences have the properties traditionally ascribed to them.

Quine's notion of stimulus synonymy is examined and found to provide a better reconstruction of traditional synonymy than he claims. But it doesn't appear to provide a complete reconstruction.

The idea that meanings may someday be made legitimate by being discovered to be correlated with brain states is examined. Several ways in which this might be accomplished are discussed. It is argued that several dubious assumptions are involved in such a program, as well as the fallacy of thinking that if an expression is significant or meaningful then there is a meaning which it has.

Finally, analyticity is examined in connection with artificial languages. Conditions are specified under which a predicate defined for the sentences of a formal language can be said to be an analyticity predicate for that language. A way is shown in which the use of an artificial language might be used to clarify the notion of analyticity as it applies to a natural language.

THE ANALYTIC-SYNTHETIC DISTINCTION

By

Dale Kent

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To argue against someone else's entire world view is a most arduous sort of argument. Those within world view A have a way of handling virtually every difficulty that comes their way; and when absolutely necessary, they make adjustments in order to preserve their scheme. Those who perceive and act through world view B cannot voice objections entirely in the language and with the images familiar to them. For the two systems, world view A and world view B seldom lie, so to speak, on the same plane or along the same axis. It is extremely difficult to "translate" from the language of the one to the language of the other. The hermeneutical problems are severe.

Consequently, we tend to try new world views on for size - at first, they hardly ever fit. Usually, we return reinforced, to our familiar world. Often, we do not "learn" much from our critics. They seem to us to miss the point. Almost necessarily so.

Michael Novak

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INTRODUCTION

Anyone familiar with the literature on the analytic-synthetic distinction cannot fail to be impressed by the sheer number of apparently distinct arguments for and against the legitimacy of this distinction. The principal purpose of the present work is to distinguish from one another, and to make as explicit as I can, the important arguments which have been, or might be, made for and against the distinction.

It has sometimes been said that a dispute over a fundamental issue in philosophy, if pursued far enough, is seen to ultimately involve a question begging, by both parties to the dispute, of the very issues under dispute. The dispute over the analytic-synthetic distinction often seems to be an example of this. This work will have succeeded if it shows where such question begging occurs and if it shows what work needs to be done, in those places where question begging doesn't occur, in order to move forward in clarifying the various issues involved in the debate over the notion of analyticity and related notions.

The impression of neutrality in what I have just said may appear to be contradicted by the body of the present work, which seems to be, for the most part, squarely against the analytic-synthetic distinction. But the thrust of this

work is due merely to a historical accident, so to speak. The historical accident is that because of the powerful arguments against the notion of analyticity presented by Quine the burden of proof at the moment lies with the proponents of the analytic-synthetic distinction. One of the aims of this work is to show as clearly as possible what it is that the friends of analyticity have to prove.

I, for one, am not ready to give up on the notion of analyticity. This is because, although Quine has offered a positive doctrine which is claimed to be incompatible with the analytic-synthetic distinction, the specific parts of this doctrine dealing with apparently analytic sentences¹ seem no better at explaining their "analytic appearance" (i.e. their apparent necessity, immunity from revision, lack of informational content, etc.) than the things said by the proponents of the analytic-synthetic distinction. It may, in the end, turn out either that the appearances presented by what we call analytic sentences need no explanation or that it is not the philosopher's job to explain them. But this remains to be seen.

Chapter 1

Criticisms of Analyticity

My main concern in this chapter is to consider various things which could be meant by saying that someone rejects or criticises the analytic-synthetic distinction, as applied to natural language, and also to examine some replies to these criticisms.

There is one interpretation which can be ruled out immediately; i.e. an interpretation which focuses on the word 'distinction' and which considers an attack on the analytic-synthetic distinction to include a claim that the distinction is not sharp, or is not clear, because the predicates 'analytic' and 'synthetic' overlap in the sense that there are or could be sentences which are both analytic and synthetic. We can rule out such an interpretation because those who have upheld the analytic-synthetic distinction, regardless of how they define 'analytic', define 'synthetic' to mean simply 'not analytic'. Thus, to this kind of criticism we can say that the analytic-synthetic distinction is as clear as the word 'not'.

A more likely interpretation of what it means to criticise the analytic-synthetic distinction is that such a criticism consists of the claim that no sentence of any natural language is analytic. Harman has interpreted some of Quine's objections to the notion of analyticity in this way.² He has also interpreted Quine as wanting to say that

"one cannot make sense of the analytic-synthetic distinction in any way such that there turn out to be analytic truths".³ This last comment might tend to suggest that one of the things wrong with the analytic-synthetic distinction is that one cannot define or explain the notion of analyticity in such a way that the claim that analytic sentences exist in some sense indirectly follows from the definition of 'analytic'. But any notion is such that it cannot be defined or explained in any way such that there turn out to be things to which the notion applies. (A counterexample to this claim might seem to be provided by so-called ostensive "definition" and its analogue, the paradigm case argument. However, these will be discussed in Section 5 of Chapter 2, where it will be seen that they are useless in proving whether there are any sentences which have the properties traditionally invoked in various definitions of analyticity.) Consequently, we need to keep in mind the distinction between the question of what it means to say that a sentence is analytic and the question of whether there are any analytic sentences. One might conceivably be encouraged to conflate these two questions by Quine's comment that "...we have made no general experimental sense of a distinction between what goes into a native's learning to apply an expression and what goes into his learning supplementary matters about the objects concerned".⁴ But if we don't make a distinction between what it means to say that something has a property and the question of whether there are any things which have the

property then we will be free to "prove" that there are analytic sentences by pointing to a sentence such as 'Everything is self identical' and saying that according to some definition of analyticity this sentence is analytic.

There is a broad characterization of analyticity, upon which Quine has commented, and which gives rise to what I call the correspondence problem.

Section 1: The Correspondence Problem

One broad way of characterizing analytic truths, as well as purely logical truths, is by saying that they are sentences that are true purely in virtue of their meaning.⁵ This characterization is intended to apply not only to those sentences which can be turned into purely logical truths by substituting synonyms for synonyms (such as 'All bachelors are unmarried') but also to sentences which apparently cannot be so transformed (such as 'If one thing is warmer than a second, and the second is warmer than a third, then the first is warmer than the third'). It also is intended to apply to a truth such as 'Everything is identical with itself' and to any propositional tautology. To say that these sentences are true purely in virtue of their meaning can be taken to mean that, given that they have the meanings which they do have, it follows that they are true. This characterization needs to be distinguished from a similar one which we will discuss in Section 3; i.e. the definition of an analytically true sentence as one which is either believed to be true or known

to be true purely in virtue of knowledge of its meaning. The definition of the present section makes no reference to knowledge or belief.

Now with respect to any definition of analyticity there arises what might be called the existence problem, which is the problem of whether there are any sentences which have the property expressed in the definiens of the definition. One way to show that there are no sentences whose truth follows from the fact that they have the meaning which they do is to take an arbitrarily chosen sentence which appears to be analytic and show that it is possible for it to be false. If this can be done then this is enough to show that although it may be true, its truth does not follow merely from the fact that it has the meaning which it does; i.e. it is not true purely in virtue of its meaning. I will discuss the existence problem in Section 5 of Chapter 2. I mention it now only to distinguish it from what I have called the correspondence problem. The correspondence problem is also a problem which seems to arise out of the characterization of an analytically true sentence as one which is true purely in virtue of its meaning. While an analytically true sentence is one which is supposed to be true purely in virtue of its meaning, a synthetically true sentence is supposed to be one which is true not only in virtue of its meaning but also in virtue of the way the world is. As Quine puts it:

It is obvious that truth in general depends on both language and extralinguistic fact. The statement 'Brutus killed Caesar' would be false if the world had been different in certain ways, but it would also be false if the word 'killed' happened rather to have the sense of 'begat'.⁶

But in objecting to the notion of analyticity Quine goes on to say:

Thus one is tempted to suppose in general that the truth of a statement is somehow analyzable into a linguistic component and a factual component. Given this supposition, it next seems reasonable that in some statements the factual component should be null; and these are the analytic statements. But, for all its a priori reasonableness, a boundary between analytic and synthetic statements has not been drawn. That there is such a distinction to be drawn at all is an unempirical dogma of empiricists, a metaphysical article of faith.⁷

And in another place he says:

...true sentences generally depend for their truth on the traits of their language in addition to the traits of their subject matter; and...logical truths then fit neatly in as the limiting case where the dependence on traits of the subject matter is nil. Consider however, the logical truth 'Everything is self identical', or ' $(x)(x=x)$ '. We can say that it depends for its truth on traits of the language (specifically on the usage of '='), and not on traits of its subject matter; but we can also say, alternatively, that it depends on an obvious trait, viz., self identity, of its subject matter, viz., everything. The tendency of our present reflections is that there is no difference.⁸

These remarks suggest a positive doctrine, in the light of which the correspondence problem arises. The doctrine goes as follows.

Every true sentence depends for its truth on two factors, the first one being the meaning which the sentence has, and the second one being the way the world is. Even the sentence 'Everything is identical with itself' depends for

its truth not only on the fact that the word 'identical' has the meaning which it does, but also on a certain non-linguistic fact about the world, namely the fact that everything is identical with itself. Because a true sentence has to correspond to the way the world is in order to be true, there are no true sentences whose truth is independent of the way the world is. Every true sentence has its two-fold dependency on meaning and fact, on language and the state of the world. There are no sentences in which the contribution which the world makes to their truth drops out.

In the light of this doctrine Quine has been viewed as implicitly accusing Carnap of not taking the correspondence theory of truth seriously when it comes to analytically true sentences.⁹ Carnap seems to be ignoring the contribution which the world makes to the truth of such sentences. He seems to be saying that analytically true sentences are true no matter how the world is; that an analytically true sentence doesn't have to correspond to the facts in order to be true because it is true in virtue of meaning and thus true no matter what the non-linguistic facts about the world are. He seems to be saying that even if the world were such that there were things in it which were not self identical the sentence 'Everything is self identical' would still be true because its truth is not dependent on the way the world is but only on its meaning.

Quine can be considered as saying that if one is to take the correspondence theory of truth seriously then this sentence, as well as all others, depends partly for its truth on its correspondence with the world, in the sense that if the world were different in relevant ways then the sentence would be false.

Now the idea of one thing being independent of another can be vaguely analyzed by saying that two things are independent of each other if changes or variations in the one are not accompanied by changes or variations in the other. This is pretty vague. But it seems clear enough to suggest a way in which the friends of analyticity might attempt to extricate themselves from the correspondence problem. They might define a sentence to be analytically true just in case it is true, and moreover, is such that if the world were different in relevant respects then the meaning of the sentence would also be different in such a way that the sentence would remain true. A synthetically true sentence could then be defined as one which is true, and moreover, is such that it is not the case that if the world were different in relevant respects then the meaning of the sentence would also be different in such a way that the sentence would remain true.

Let us look at a possible problem hidden in the notion of "relevant respects", in terms of the example 'Everything is self identical'. The only aspect of the world which is clearly relevant to the truth of this sentence is the fact that everything is self identical. Now our counterfactual definition of analyticity, as applied to the apparently

analytic sentence 'Everything is self identical', says that if the world were such that not everything is self identical then the sentence 'Everything is self identical' would still remain true. But we are inclined to protest that, on the contrary, if the world were such that not everything is self identical then the sentence 'Everything is self identical' would clearly be false. But this protest misses the intended meaning of the definition. Although the definition is of counterfactual form, what is intended by it can perhaps be illustrated in terms of the notion of various distinct worlds. The basic idea is that if 'Everything is self identical' is analytically true then it is true in this world and, moreover, is such that any world which we would from our world describe as being a world in which not everything is self identical would also be a world in which the sentence 'Everything is self identical' has a different meaning than it does in our world. In every such world it would have the meaning which the sentence 'Not everything is self identical' has in our world.

And, taking the sentence 'I have a green car' as an example, the basic idea behind the definition of a synthetically true sentence is that this sentence is true in our world, but is not such that in every world which we would from our world describe as a world in which I don't have a green car is a world in which the meaning of the sentence 'I have a green car' is different than it is in this world. In some, but not all, of these worlds the sentence has the same meaning which

it does in this world; and in these worlds the sentence is false.

Talking in terms of the notion of various distinct worlds also helps us to see a way in which the basic idea intended by our definition is an improvement over the notion of an analytically true sentence as one which is true in all (and presumably only) possible worlds. Assuming (as the logical positivists did) that analyticity provides an explanation of logical and necessary truth, the basic idea behind our definition is that analytically true sentences are true in all worlds simpliciter, including even "impossible" ones. For example, a world which we, in our language, would describe as a world in which not everything is self identical is presumably an impossible world. Yet the sentence 'Everything is self identical', if both true and analytically true in our actual world, would be true in this impossible world also because, according to the idea behind the definition, this sentence would have a different meaning in this impossible world than it does in our actual world. Thus, since the truth of this sentence (assuming that it is analytically true) is independent of the way the world is, our definition of analyticity solves what I have called the correspondence problem. However, the notion of an analytically true sentence as one which is true in all (and presumably only) possible worlds does not solve the correspondence problem. For on this latter definition of analyticity the truth of an analytically true sentence is not totally independent of

the way the world is. For if the world were such that not everything is self identical then, since such a world would be an "impossible" world, the sentence 'Everything is self identical' would be false. According to the basic idea behind our definition however, the truth of an analytically true sentence is totally independent of the way the world is since such a sentence is true no matter how the world is.

A question may seem to arise with respect to the world which I said was a world which we, in our language, would describe as a world in which not everything is self identical. Assuming that 'Everything is self identical' is analytically true, this sentence would, in that world, be true because in that world it would have a different meaning which it has in our world. The question then is: Is this weird world one in which everything is self identical or not? What, in other words, is the "real truth" about this world? The answer comes to light when we consider the fact that a given string of words is not true or false simpliciter, but true or false in a language. A given string of words can be a true sentence of one language and a false sentence of another language. In our language this weird world is truly describable as a world in which not everything is self identical. But in this weird world some strings of symbols would have different meanings than they do in our language. In the language used by the inhabitants of this weird world the string of symbols 'Everything is self identical' would be a true sentence.

If any sentence "behaves", so to speak, in the way that our notion of analyticity says that it does, it is still hard to see how this "behavior" is due to the fact that the sentence has the meaning which it does in this world. But if any sentence does have the properties attributed to it by our notion of analyticity, we may just want to take this as a strange ultimate fact about those sentences, just as we take it as a strange and ultimate fact about the world that space is curved. At any rate, our notion of analyticity does seem to provide an answer to the correspondence problem; a problem which consists of the question of how it is possible for the truth of a true sentence to be independent of the way the world is. I know of no other way to meet this problem.

I might note parenthetically that our notion of analyticity not only solves the correspondence problem but it also has an additional advantage over the notion of truth in all (and only) possible worlds. This latter notion never seemed illuminating to me since a possible world can only be described, it seems, as a world in which logical or analytic truths hold true. But then to say that logical truths are true in all and only possible worlds is just to say that logical or analytic truths are true in all and only those worlds in which they are true. But any sentence is true in all and only those worlds in which it is true. Consequently, a truth of physics could be defined as a sentence which is true in all and only physically possible worlds, i.e. worlds

in which all the truths of physics hold true. But this, of course, is equally unilluminating. However, if we construe the basic idea behind our definition of analyticity in terms of various distinct worlds we need not use the word 'possible'. We can just say that an analytic or logical truth is one which is true in all worlds, whereas a synthetic truth is not true in all worlds.

Although the basic idea behind our definition of analyticity seems easily construable in terms of the notion of various distinct worlds the definition itself is of counterfactual form. Counterfactuals, if they are supportable at all, are supported by true laws pertaining to objects in our actual world. Are there any statements of lawlike form which, if true, would support the definition? It seems that there are and that the friends of analyticity are appealing to such lawlike statements when they say that if anyone disagrees with us as to the truth of a sentence such as 'Everything is self identical' then he is using the expressions in this sentence to mean something different from what they normally mean. The question arises, of course, of whether this latter claim is true. In Section 5 of Chapter 2 I will consider an argument which attempts to show that it is not true. But for now I merely want to note that it is not irrelevant, as Harman seems to think,¹⁰ for the friends of analyticity to make such a claim in support for their claim that some apparently analytic sentences are true independent of the way the world is, and that they thus behave in the way that

our definition of an analytically true sentence says they do.

I do not consider the correspondence problem to be particularly important. I have discussed it for the sake of completeness because it is a problem which seems to be suggested by the comments of Quine quoted earlier in this section. A more important problem is the question (to be discussed in Section 5 of Chapter 2) of whether there are any analytic sentences. But an even more important problem is the problem of how the claim that a sentence is analytically true justifies or explains the claim that the sentence in question is true. This last problem is of paramount importance because the primary interest in analyticity lies in the epistemological role it is supposed to play. The appeal to analyticity is supposed, in some sense, to account for, or justify, or explain, our belief in or knowledge of the truth of a sentence. In the next two sections I will examine this question.

Section 2: The Justificatory Power of Analyticity

The ascription of analyticity to a sentence might be considered to be a justification for the claim that it is true. If, for example, I claim that all bachelors are unmarried and someone asks me to justify this claim (by asking me how I know that it is true, or why I believe it) then it might seem that I have provided a good justification by saying that the sentence in question is analytic. But

is this a good justification?

Typically, the request for justification arises when there is doubt or disagreement between two people over whether a certain sentence is true. I will have provided a good justification if I can show how the sentence in dispute either inductively or deductively follows from other beliefs which we both share. But in such a typical situation the sentence in dispute means the same for both of the disputants. It is just that one of them is privy, or thinks he is, to some evidence for the truth of the sentence which the other is not.

Let us go along, for the time being, with the claim of the friends of analyticity that if someone doubts that all bachelors are unmarried then he is using the words 'bachelor' or 'unmarried' in a different sense than they are normally used or, as it is sometimes put, he is speaking a different language. More to the point for the purposes of this section is the case where I, in a philosophical spirit, ask myself what my justification is for the claim that all bachelors are unmarried. And the question is whether the claim that this sentence is analytic is a good justification for the claim that it is true. But here again I will have provided myself a good justification if I can show myself that the sentence in question follows from something which is more certain, or believed by me to a greater degree, than the claim that all bachelors are unmarried. However, the claim that the sentence in question is analytic does not provide

a good justification for the claim that it is true for the simple reason that the former claim is no more certain than the latter. In other words, the degree of my belief that the sentence in question is analytic is no greater than the degree of my belief that it is true. Both beliefs are equally certain. I provide no better justification for my belief that the sentence in question is true by saying that it is analytic than I do by saying that it is obviously true.

In order for the ascription of analyticity to a sentence to constitute a good justification for the claim that the sentence is true, it must be possible to believe in its analyticity more than in its truth. But I know of no sentence for which this is possible. And I am confident that the friends of analyticity would agree that it is not possible to believe more strongly in the analyticity of a sentence than in its truth. But if so, then in what sense does the claim that a sentence is analytically true provide a justification for the claim that it is true? Wouldn't it just be better to say that sentences such as 'All bachelors are unmarried' and 'Everything is self identical' either need no justification or are obviously true (or perhaps even that they are inductively supported by their instances) instead of putting forward a theory which provides only a pseudo-justification?

Let us now look at the claim that the ascription of analyticity to a sentence constitutes part of an explanation for our belief in its truth. There are some differences

between explanation and justification. In a justification the justificandum, i.e. the thing to be justified, is more in doubt than the justificans, i.e. that which does the justifying. In an explanation the situation is reversed. The explanandum, i.e. the sentence describing the event to be explained, is often less in doubt than the explanans. Perhaps this difference might permit us to attribute some explanatory power to the notion of analyticity.

Section 3: The Explanatory Power of Analyticity

An analytically true sentence might be characterized not as one which is true purely in virtue of its meaning but as one which is, so to speak, believed true purely in virtue of knowledge of its meaning. More precisely, an analytically true sentence might be characterized as one such that if you understand what it means then you believe that it is true. This is equivalent to saying that an analytically true sentence is one such that if you don't believe that it is true then you don't understand it. Let us call this a doxological characterization of analyticity in order to distinguish it from the one discussed in Section 1; i.e. from an analytically true sentence characterized as one which is true purely in virtue of its meaning.

Let us also distinguish yet a third characterization of analyticity which might, for lack of a better word, be called epistemological. This third characterization says that an analytically true sentence is one a knowledge of whose

meaning is sufficient for a knowledge of its truth, or that it is a sentence whose truth is knowable in virtue of a knowledge of its meaning.

I will attempt to show that the ascription of analyticity to a sentence has no explanatory power under either the doxological or epistemological definition of analyticity. But before I do there is a defect in these definitions which needs to be discussed lest it be thought that what is said in the sequel hinges in some essential way on this defect. The defect in these definitions consists in the fact that they do not apply to sentences whose analyticity is not obvious. There are several examples of sentences which would incline us to the view that it is not always the case that the analyticity of a sentence is obvious. One kind of example consists of sentences of the form 'x is good if and only if P' where 'P' is replaced by one of the various expressions which, in the history of ethics, have been put forward as an analysis of 'good'. G. E. Moore claimed that none of these definitions of 'good' were adequate because it was not contradictory to claim that something had the property P but wasn't good. In other words he claimed that every such definition which had been proposed was, even if true, only synthetically true rather than analytically true, and thus did not capture the meaning of 'good'. In fact what he called the naturalistic fallacy could be explained as the fallacy of confusing the analytic with the synthetic with respect to biconditionals of the above form. Stevenson

claimed that the reason why pre-Stevenson analyses of 'good' had failed was because the various expressions which had been put in place of 'P' did not have the same emotive meaning as 'good' even though their descriptive meanings might be the same. But aside from questions of emotive meaning I have always felt that Moore was too quick to claim that various proposed definitions of 'good' were at best, synthetically true. It always appeared plausible to me that some of these proposed analyses of 'good' were indeed analytic, but not obviously so.

Another example of a kind of sentence whose analyticity is not obvious is provided by the following kind of case which most of us have come across. Suppose that someone gives a political analysis of a society which consists, in part, of the claim that certain evils in society are due to the fact that the society is capitalistic. Such a claim can be considered to be of the form 'If there is capitalism then E', where in place of 'E' is put some description of various evils. One often finds that when counterexamples to a claim of this form are proposed the ideologue conveniently and subtly changes the meaning of 'capitalism' and of the expressions put in place of 'E' in such a way as to save the claim from refutation. When this happens many times one begins to suspect that the claim is, in spite of appearances to the contrary, really analytic for the ideologue even though its analyticity is not obvious even to the ideologue.

A third kind of sentence which inclines one to want to countenance sentences whose analyticity is not obvious is provided by mathematics. We may want to say that all, or perhaps just most, of the truths of mathematics are analytic. Consider, for example, Goldbach's conjecture, which says that every even number is the sum of two primes. Here is a sentence whose meaning we understand. Yet we may not believe that it is true. We may believe it on the grounds that every even number so far investigated is the sum of two primes. But the point is that understanding what it means is not sufficient for believing that it is true, since it is possible to understand what it means without believing that it is true.

Now in the case of mathematical statements, if not in the other two kinds of cases, we can expand our definitions in such a way as to accommodate them. We might amend the doxological definition, for example, by saying that a sentence is analytically true either if it is believed true in virtue of meaning or if it is a logical consequence of sentences which are believed true in virtue of meaning. Thus, if Goldbach's conjecture, for example, is, unbeknownst to us, a consequence of our favorite axioms of arithmetic then it too is analytic, although not obviously so.

It turns out, however, that the ascription of analyticity to a sentence has no explanatory power whether or not we expand the definitions in the way indicated. Consequently I will, for the sake of simplicity, use our definitions in

their original unamended form, indicating at the appropriate places where their expansion to include non-obvious analyticity would make a difference to the argument.

Suppose we have an analytically true sentence *S* whose analyticity is obvious. For example, let *S* be the sentence 'All bachelors are unmarried' or 'Everything is self identical'. A Hempelian type explanation of Jones' belief in *S*'s truth in terms of *S*'s analyticity would look like this:

1. For any *x*, if *x* is analytically true then anyone who understands the meaning of *x* believes that it is true.
2. *S* is analytically true.
3. Jones understands the meaning of *S*.

_____ therefore

4. Jones believes that *S* is true.

(If '*x*' ranges over sentences whose analyticity is not obvious then the explanation is already defective on the grounds that premise 1 is false. But let that go since there are more serious problems.)

One of Hempel's requirements for a good explanation is that at least one of the lawlike statements in the explanans be synthetic. This explanation violates that requirement because the only lawlike statement in the explanans is premise 1, and premise 1 is analytic. Part of what it means to say that a sentence is analytic is that anyone who understands it believes that it is true. (Recall that we are limiting the range of '*x*' to those sentences whose analyticity is obvious.) What would it be like for premise 1 to be

false? This would require that there be an analytically true sentence which someone understands but doesn't believe to be true. But we can be sure that the friends of analyticity, if allegedly presented with such a sentence, would say either that the sentence is not really analytic, or that the person in question really doesn't understand it completely, (or understands it differently from the way it is normally understood), or that he really does believe that it is true.

Since no lawlike statement in this putative explanation is synthetic it is not really an explanation at all. Such an explanation is analogous to "explaining" the fact that someone is unmarried by pointing to the fact that she is a spinster, along with the "law" that all spinsters are unmarried. It would seem that the explanation of Jones' belief in the truth of S in terms of S's analyticity is no advance over "explaining" his belief in terms of the fact that the truth of S is obvious to him.

Quine has made a very similar objection to what he calls the linguistic doctrine of elementary logical truth.¹¹ There are some differences between Quine's objection and ours. Quine seems to be denying the explanatory power of an explanation which has as its explanandum not the claim that Jones believes S to be true, but rather the claim that S is true. But this difference is unimportant since we can easily construct a putative explanation, in analogy with the one given above, which has as its explanandum the claim that S

is true. We need merely change 'believes' in premise 1 and statement 4 to 'knows' and add the further premise that if anyone knows that x is true then x is true. We could then deduce the further conclusion that S is true. The additional premise that if someone knows a sentence to be true then it is true is also a lawlike statement. But it too is analytic, as well as the amended premise 1. Thus, this amended explanation of the fact that S is true would still be in violation of Hempel's requirement.

Curiously enough, Carnap says that he agrees with Quine's objection that what Quine calls the linguistic doctrine of elementary logical truth is empty and without experimental significance.¹² He agrees with it because of his view that philosophical doctrines which are the result of explication are analytic. Perhaps one can go along with this view. Perhaps one of the jobs of a philosopher is to make the analyticity of certain doctrines more obvious. But what is puzzling, to say the least, is the sense of 'explanation' in which the claim that a sentence is analytic explains the fact that a person knows a sentence to be true or the fact that he believes it to be true. It seems that appealing to the analyticity of a sentence in order to explain Jones' belief that it is true is no more of an explanation than that given by Moliere's physician when he attempted to explain the fact that opium puts a person to sleep by appealing to its dormitive virtue. One might conceivably respond to this by saying that there is a sense of 'explanation', going

beyond Hempel's sense of the word, which permits there to be distinctly philosophical explanations. But then the burden is on one who so responds to provide a criterion for distinguishing between good and bad philosophical explanations and to explain why the explanation given by Moliere's physician is not a good philosophical explanation, and why an explanation which utilizes the notion of analyticity is a better philosophical explanation than one which utilizes the notion of, say, essences or intrinsic natures. In what sense is it a better explanation to appeal to the analyticity of the sentence 'Everything is self identical' as an account of Jones' belief in this sentence than it is to say that it is in the nature of everything to be self identical and that Jones believes this because he has an insight into the nature of reality?

Let us call the objection of analyticity which points to the fact that statements 1 through 3 violate Hempel's requirement that "no synthetic law" objection. The question arises of whether Quine can consistently put forward this objection. Carnap has hinted that he cannot,¹³ and that Quine's objection to the linguistic doctrine of elementary logical truth (which is relevantly similar to the no synthetic law objection) presupposes, in some sense, the very notion of analyticity which is being objected to. Thus, the question of whether Quine can consistently put forward this objection is no mere issue of exegesis, but rather a question of whether the notion of analyticity is so fundamental that it is, in some sense, unavoidable.

Quine has sometimes been interpreted as claiming that no sentence is analytic.¹⁴ He has also often claimed that the notion of analyticity is obscure or unintelligible. Quine's use of the expressions 'obscure' and 'unintelligible' is itself quite obscure. Later on we will discuss in detail an important sense of 'obscurity'. But for now we can, I think, get by without analyzing the notion of obscurity any further.

First of all, let us assume that someone claims that no sentence is analytic, i.e. that every sentence is synthetic. Then Hempel's requirement will be automatically fulfilled by the potential explanans constituted by statements 1 through 3, and so such a person cannot put forward the "no synthetic law" objection. But he will still reject the potential explanans as an explanans for a different reason, i.e. because statement 2 is false.

Suppose however, that a person claims that the notions of analyticity and syntheticity are, in some sense, unintelligible. Hempel's requirement that there be at least one synthetic lawlike statement in the explanans will then also be unintelligible. And thus such a person cannot put forward the "no synthetic law" objection either, since he cannot object to the explanans on the grounds that it violates an unintelligible requirement. But he can object to it for a different reason. He can object to it on the grounds that premises 1 and 2 contain the unintelligible predicate 'analytically true'. And presumably everyone would agree to

the requirement that every sentence in the explanans be intelligible, as well as with the assumption that a sentence is unintelligible if it contains an unintelligible predicate.

Thus, regardless of whether someone rejects the notion of analyticity on the grounds that no sentence is analytic, or on the grounds that the notion of analyticity is unintelligible, he can still consistently put forward the argument that the notion of analyticity has no explanatory power.

For those who accept the intelligibility of the notion of analyticity, as well as the claim that some sentences are analytic, there is a feature of the "no synthetic law" objection which deserves mention. It seems that this objection will withstand any improvements which might be made in the clarity of the notion of analyticity. The reason for this is the fact that, since premise 1 seems clearly analytic, the chances are minimal that a further clarification of the notion of analyticity would show it to be synthetic. In other words, since premise 1 is somewhere within the class of paradigm cases of analyticity it could not turn out to be synthetic without, as we say, "changing the meaning" of the word 'analytic'.

Section 4: The Clarity of 'analytic'

The notion of analyticity and its cognates could be, and has been, criticised on the grounds that it is not clear. To say that the notion of analyticity is not clear may just be a way of saying that it is difficult to

understand how a sentence can be true independent of the way the world is (a problem discussed in Section 1). Or it may be a way of saying that it is difficult to see how the ascription of analyticity to a sentence justifies the claim that it is true (see Section 2). Or it may be a way of saying that it is hard to see how the claim that a sentence is analytic explains anything about the sentence (see Section 3). However, there is a primary sense of 'unclear' in which the notion of analyticity and its cognates could be said to be unclear. The purpose of this section is to partially explicate this primary sense of 'unclear', to examine the claim that analyticity is unclear in this sense, and to examine some of Quine's objections to the notion of analyticity in terms of this sense of clarity.

I will limit myself to the characterization of clarity as it applies to monadic predicates, not only because this is sufficient for our purposes but also because of complications which arise when one attempts to define the notion of the clarity of a sentence in terms of its well-formedness and the clarity of its component predicates.

We first define the notion of a predicate F being clear at an object a . Reflection on the way 'clear' is sometimes used suggests that a predicate F is clear at an object a if and only if either:

1. We believe it to be true that a is an F , or
2. We believe it to be false that a is an F , or
3. We know what to do to gain evidence for the claim that a is an F .

Strictly speaking, the clarity of a predicate at an object is relative to both a person and a time. For a predicate can be clear at an object for one person but not for another, and it can be unclear for a given person at one time but clear for that same person at a later time. But I have omitted such explicit relativization for the sake of simplicity.

Here are some examples to illustrate the definition. If Jones has no hair at all then the predicate 'bald' is clear at Jones since we believe (let us suppose) that it is true that Jones is bald. And if Smith has a full head of hair then 'bald' is also clear at Smith since we believe (let us suppose) that it is false that he is bald. But if a third man, Stevenson, has a small amount of hair such that we don't want to say that it is true that he is bald and also don't want to say that it is false that he is bald then 'bald' is not clear at Stevenson. This is because we don't know what to do to gain evidence for the claim that Stevenson is bald. In fact, the claim that he is bald is neither true nor false. It has no truth value at all. It is no surprise that we don't know what to do to gain evidence for the truth of a claim that has no truth value. With respect to the question of Stevenson's baldness there is no truth of the matter to be discovered. I don't want to suggest that 'bald' couldn't be made more precise but only that, as things now stand, this predicate is not clear at Stevenson.

Clause 3 in the definition of clarity reflects the fact that in a case where we have no opinion about the truth value of a sentence of the form 'a is an F' this lack of opinion may be due to either one of two distinct factors. It may be due to the fact that the predicate F is unclear at the object a, in which case the sentence has no truth value to be believed in. (It may also be due to the fact that the singular term 'a' is not clear. But this need not concern us. For our concern is with the clarity of semantical predicates such as 'analytic', these predicates being applicable to sentences. And sentences are typically named via quotation mark names, these quotation mark names themselves being clear since we know what they refer to.) On the other hand this lack of opinion may be due simply to the fact that although the sentence has a truth value we are not in possession of any evidence for or against its truth, although we know what to do to gain evidence for its truth. In this latter kind of case the predicate is clear at the object a.

Consider some further examples. Many persons are such that I don't have any opinion as to whether or not the predicate 'is elected president of the United States in the year 2000' applies to them. But this lack of opinion is not due to any unclarity in this predicate. The predicate is clear at each object since for each object we know what to do to gain evidence for the claim that the predicate applies to that object; i.e. wait until the year 2000 and look in the newspapers for sentences of the form '____ has been elected

president of the United States', where the blank is filled in by the name of the object in question.

By contrast consider, for example, the predicate 'is a possible man'. Limiting our considerations to actual objects we can ask whether this predicate applies to the pencil on my desk, or to any actual non-man for that matter. Or consider the predicate 'equals the number of possible men'. Of what number is this true; i.e. how many possible men are there? The trouble with these questions is not just that we don't know the answer to them but that we don't know what to do to gain evidence for an answer. Indeed there is no answer to be had. And this is what makes these last two predicates unclear.

In the case of an unclear predicate it is not sufficient to say that what we need to do to gain evidence for whether it applies to an object is to "reason" or "think about it". This kind of injunction is not specific enough. It can apply to most any unclear predicate. By contrast, with the clear predicate 'is elected president of the United States in the year 2000' we have not only the injunction "wait and see", but also directions which are specific to this particular predicate.

It might be wondered why clauses 1 and 2 are required in the definition of clarity. The answer is that they are there to cover certain paradigm cases of clear predicates, the observational ones. Take, for example, the predicate 'red'. It might be thought that 'red' fulfills clause 3,

and that therefore clauses 1 and 2 are not required. It might be claimed that we know what to do to gain evidence for the claim that a given object is red; i.e. look and see. But this is also what we do to gain evidence for the claim that it is green. And if we don't require the directions for gaining evidence for the application of a predicate to be specific to the predicate in question in the case of observational terms but do require such specificity in the case of non-observational terms then we could be justifiably accused of a philosophically unjustified bias in favor of observational terms when it comes to their clarity. This would not sit well with those philosophers who consider the process of "seeing with one's mind" that something is so (e.g. "seeing" with one's mind that two words have the same meaning) to be just as legitimate as seeing with one's eyes that something is so (e.g. seeing that the object in front of me is red). We don't want our definition of clarity to be tied to a philosophical doctrine which says that only observational terms are clear. Rather we want our definition of clarity to be an explication of a sense of clarity which we all use, regardless of our philosophical doctrinal differences. Since most philosophers would agree that observational terms are clear we want our definition to reflect this fact.

Now it might be thought that clause 3 is sufficient to capture the clarity of observation terms on the grounds that the directions for gaining evidence for the claim that an

object is red is specific to the predicate 'red'. It might be claimed that the directions consist of looking to see whether the object in question has the same color as, say, a fire engine. But then the question arises of whether the predicate 'red' is clear at that fire engine. What are the directions for gaining evidence for the claim that the fire engine is red? It seems clear that if we are to avoid both an infinite regress and a kind of circularity which just brings us back to the original object in question we have to include something like clause 1 and 2 in order to take care of the agreed upon clarity of observational terms. It might be thought that clause 3 is sufficient to capture the clarity of observational terms on the grounds that the directions I have for gaining evidence for the claim that the object in front of me is red consist of asking suitably placed members of my linguistic community whether this object is red. (Notice that the reference to my linguistic community is necessary since we would not want to claim that 'red' is unclear to me on the grounds that some German speaker who knows no English neither assents to nor dissents from the claim that the object in front of us is red.) But this suggestion is actually equivalent to clause 1 in the definition since I will not regard anyone to be a member of my linguistic community unless he agrees with my belief that 'red' applies to the (red) object in front of us.

There is another feature of the definition which perhaps deserves mention. Why not, it may be asked, replace the word 'believe' in clauses 1 and 2 by the word 'know'? The answer is that if we did so then the clarity

of a predicate F at an object a would depend on the truth (clause 1) or the falsehood (clause 2) of the sentence ' a is an F '. Suppose, for example, that I see an object which appears red to me at time t_1 . Suppose also that later on, at time t_2 , I discover that I was the victim of some practical joke which involved the use of trick lighting or a secretly administered drug which made an object which was not red appear to be red to me. Since knowledge implies truth I will, at t_2 claim that since the object was not red at t_1 I didn't know at t_1 that it was red. But on the suggested amendment of the definition I would have to conclude that 'red' was not clear to me at t_1 . But intuitively we want to say that 'red' was clear to me at t_1 , even though my belief that the object was red was a false belief. The clarity of a predicate F at an object a should not depend on the truth value of the sentence ' a is an F '.

Some further definitions: If a predicate is not clear at an object then we will say that it is obscure at that object. If a predicate is clear at an object then we will also say that there is a search procedure for the predicate at that object. If a predicate is clear at every object we will say that there is (are) a search procedure(s) for the predicate, and that the predicate is completely clear.

Some predicates are such that they have a search procedure which is the same for each object at which they have a search procedure at all. And this might lead one to believe that the search procedure for a predicate is its meaning.

Consider, for example, the predicate 'chair'. Its search procedure is the same at every object at which it is clear, and consists of directions telling us to see whether the object in question is used or could be used to sit on. And this example makes it sound like the search procedure for a predicate is its meaning. Perhaps it is in this case. But it isn't in the general case. As a counterexample consider the predicate 'true'. This predicate has a different search procedure at the sentence 'snow is white' than it does at the sentence 'grass is green'. That is, we do different things to gain evidence for the claim that grass is green than we do to gain evidence for the claim that snow is white. But the predicate 'true' doesn't have a different meaning depending on the sentence to which it is applied.

Since clarity is a matter of degree we would like to be able to compare two predicates and say that one predicate is clearer than another. If the sets of objects at which predicates were either clear or obscure contained only a finite number of members then we could simply define a predicate *F* as being clearer than a predicate *G* just in case the number of objects at which *F* is clear is greater than the number of objects at which *G* is clear. Moreover, the notion of clarity would also be a metric concept which would allow us to define what it means to say, for example, that one predicate is three times as clear as another. But typically, predicates are clear or obscure at an infinite number of objects. However, we can specify a sufficient condition for the relative notion of one predicate being

clearer than another. We can say that a predicate *F* is clearer than a predicate *G* if the set of objects at which *G* is clear is a proper subset of the set of objects at which *F* is clear. However, this proper subset condition doesn't seem to be also necessary for *F* being clearer than *G*. Intuitively it seems that 'bald' is clearer than 'heavy' because there seem to be "more" objects at which 'heavy' is obscure than at which 'bald' is obscure. Yet there are people who are clearly bald but at whom 'heavy' is obscure. And thus, if we were to make the proper subset condition a necessary one we would then be led to the counterintuitive conclusion that 'bald' is not clearer than 'heavy'.

Our sufficient condition for *F* being clearer than *G* is meant to apply to many kinds of predicates. But since we are interested here only in how it applies to the notion of analyticity I will just concentrate on those applications which are relevant to our purposes.

The basic idea is that if every object at which *G* is clear is also an object at which *F* is clear, but that *F* is clear at objects at which *G* is obscure, then *F* is clearer than *G*. This can be illustrated by the fact that 'true' is clearer than 'analytically true' (as will be argued in Section 1 of Chapter 2). Every sentence at which 'analytically true' is clear is also a sentence at which 'true' is clear. However, there are sentences at which 'analytically true' is obscure but at which 'true' is clear. One such sentence is mentioned by Quine. He says:

I do not know whether the sentence 'Everything green is extended' is analytic. Now does my indecision over this example really betray an incomplete understanding, an incomplete grasp of the "meanings", of 'green' and 'extended'? I think not. The trouble is not with 'green' or 'extended', but with 'analytic'.¹⁵

The trouble is the obscurity of the predicate 'analytic' at the sentence 'Everything green is extended'. On our analysis of obscurity this means that we believe it to be neither true nor false that the sample sentence is analytic, and we don't know what to do to gain evidence for the claim that it is analytic. A sentence of the form 'All A's are B's' can be said to be analytically true just in case the meaning of the term in place of 'B' is included in the meaning of the term in place of 'A'. Quine has often rejected the notion of meaning on the grounds that the identity conditions for meanings are not clear. This is as good an example as any of what Quine can be taken to mean, although we have to adjust the complaint, for the sake of this example, to include not only obscurity of identity conditions for meanings but also the obscurity of conditions for "partial" identity of meanings, i.e. meaning inclusion.

In the light of the fact that we don't know what to do to gain evidence for the claim that the sample sentence is analytic Grice and Strawson¹⁶ miss the point when they say that the indecision would still remain if we replace the problematic word 'analytic' with the presumably unproblematic word 'true'. Their claim is that we would be just as undecided over whether the sample sentence is true as we

are over whether it is analytic. Maybe so. But the point that they miss is that 'true' is clear at the sentence 'Everything green is extended', while 'analytic' is not. In order to increase our evidence for the claim that the sample sentence is true we need only gather up more and more instances of things which are both green and extended. But what are we to do to gain evidence for the claim that the sample sentence is analytic. Needless to say, we cannot answer by saying that we need only ask ourselves whether it is logically possible for something to be both green and extended, since the relevant notion of logical possibility is just as obscure as the notion of analyticity.

There is an important question concerning Quine's complaint that the notion of analyticity is obscure. And that question is this: should we interpret his complaint as meaning that the predicate 'analytic' is completely obscure, i.e. obscure at every sentence? Or should we interpret it to mean that while it is clear at a few sentences, such as the sentence 'All bachelors are unmarried', it is not clear enough to be a candidate for scientific utility? I interpret his complaint in the second way, and for the following reasons.

First of all, if the predicate 'analytic' were completely obscure then it would be like the genuinely meaningless predicate 'glug'. And if this were the case then Quine wouldn't be so good at distinguishing synonymy from mere coextensiveness, nor at distinguishing logical truth from

the wider concept of analytic truth, nor at distinguishing the theory of meaning from the theory of reference, nor at seeing how various responses to his objections merely assume the notion of analyticity in a disguised form, not at being able to define the notions of analyticity, meaning, and synonymy in terms of each other. Quine knows very well what is intended by that notion of analyticity which is defined as "turnable into a purely logical truth by substitution of synonyms for synonyms". It is just that his standards of clarity are very high.

In the second place, my interpretation of some of Quine's complaints against the notion of analyticity allows him to acknowledge the soundness of a very powerful argument of Grice and Strawson,¹⁷ for the claim that 'analytic' is meaningful at least to some extent. They point out that philosophers apply and withhold 'analytic' to more or less the same sentences, and that they are able to do this for a potential infinity of new sentences which they haven't been explicitly taught to characterize as either analytic or synthetic. The idea is that in order for this to be possible there must be some rule, no matter how implicit, and no matter how poor philosophers may be at making it explicit, guiding our use of the word 'analytic'. And this is enough to show that 'analytic' is not completely meaningless. In other words, this shows that there is a rule for its use.

Harman has responded to this argument by saying that it is merely an application of the paradigm case argument.¹⁸

He doesn't think much of such arguments because a similar argument would show that there were once witches. That is, since there were once people to whom most people (let us suppose) applied the word 'witch', witches once existed.

Now it is true that paradigm case arguments applied to a predicate *F* are usually taken to prove that there exists something to which the predicate applies. When G. E. Moore held up his famous hand, he did so to prove that there existed something to which the predicate 'material object' applied. But this is not the kind of argument which Grice and Strawson have given. Their goal is not to show that analytic sentences exist, but rather to show that the predicate 'analytic' is meaningful. The crucial part of their argument is not the claim that there are sentences to which philosophers apply the word 'analytic' but rather that they are able to apply this word, in a non-arbitrary way, to new sentences which they have not been taught to call analytic. What we have to keep in mind here is the distinction between the existential claim that there exist things to which a predicate applies, and the different claim that the predicate is meaningful. Referring back to Harman's example, although we now believe that witches never existed, the predicate 'witch' remains meaningful to this day.

Harman responds to this kind of argument by saying that all it shows is the meaningfulness of the predicate 'seems to be analytic', which does not mean the same as the predicate 'is analytic'.¹⁹ These two expressions do indeed mean

something different. But the point is that the expression 'analytic' appears in both of them and means the same in both cases. I don't mean something different by the word 'green', for example, when I claim that a certain object seems green than I do when I claim that it is green. And it just begs the question to admit this in the case of 'green' and disallow it in the case of 'analytic' by claiming that 'seems analytic' should be taken as a simple unanalyzable predicate not dividable into 'seems' and 'analytic'.

Thus, Grice and Strawson's argument still stands. And we can grant the soundness of this argument while still maintaining the view which I have attributed to Quine, i.e. the view that the concept of analyticity, while meaningful to some extent, is not clear enough to be useful.

A third reason in favor of my interpretation of some of Quine's remarks is that it removes a serious apparent inconsistency in his writings. The apparent inconsistency is that while Quine has often said that he doesn't understand the concept of synonymy he also says that he understands it when it is created by fiat in the case of explicit conventional notational abbreviation.²⁰ Grice and Strawson point out that Quine is like a person who says that he understands what it means to say that two things fit together when they have been expressly made for the purpose of fitting together, but that he doesn't understand what this means when two things just accidentally happen to fit together.

When Quine says that he understands synonymy when it is created by fiat in the case of explicit notational abbreviation, you can take his comment at face value, or you can regard it as a slip of the mind on his part. I prefer to take it at face value, for the first of the reasons which I gave above, i.e. Quine's obvious understanding of what is intended by the concept of synonymy.

Quine's admission that he understands synonymy when it is created by fiat is consistent with his other objections if we interpret some of these other objections as amounting to the claim that the concept of synonymy is clear to some extent but not clear enough to be useful.

I might remark that the kind of analyticity which Quine admits to understanding is limited to 'analytic' defined as 'turnable into a purely logical truth by substitution of synonyms for synonyms' where these synonyms are limited to those created by fiat, as in the case of explicit conventional notational abbreviation. He has never admitted to understanding the notion of synonymy when it is a case of pre-existing synonymy, although the argument of Grice and Strawson, referred to above, shows that if he is to be consistent then he ought to admit to an understanding of 'synonymous' when it applies to sentences exemplifying pre-existing synonymies as well. But if he made this further admission he is still free to complain, as I have interpreted him as doing, that 'synonymous' (and therewith 'analytic' defined as 'turnable into a purely logical truth by substitution of synonyms for

synonyms') is too obscure (in our sense) to be useful. He would also still be free to complain that he doesn't understand 'analytic' when it is defined as 'believed true in virtue of meaning' and when it is defined as 'true in virtue of meaning'. Moreover, it might be remarked that while one can admit to understanding 'analytic' defined as 'turnable into a logical truth by substitution of synonyms for synonyms' it doesn't follow that analytic sentences, so defined, are true in virtue of their meaning. No doubt they are true in virtue of meaning if the purely logical sentences into which they are transformed are true in virtue of their meaning. In Section 1 we have discussed the difficulty involved in claiming that any sentence is true purely in virtue of its meaning.

Obscure words can be useful for some purposes. They are useful to the advertiser because they permit the ever hopeful consumer to interpret the advertisement in accord with his desire to get high quality merchandise at a fair price, and at the same time are too obscure to be the basis for a successful lawsuit against the manufacturer on the grounds of false advertising.

The purposes relative to which the obscurity of analyticity is to be judged are presumably the purposes of science, i.e. explanation and prediction. But since not even the predicates of science are completely clear, the question arises of how clear a predicate has to be to be scientifically useful. I don't know the answer to this question, and

neither does anyone else. We can ask, however, what Quine would take to be an acceptable standard of clarity. We might seek an answer by considering what it would take, according to him, to remove the obscurity.

Also we find it argued that the standard of clarity that I demand for synonymy and analyticity is unreasonably high; yet I ask no more, after all, than a rough characterization in terms of dispositions to verbal behavior.²¹

The expression 'verbal behavior' is pretty vague. But we know from Quine's work in Word and Object that what he has in mind here are dispositions to assent and dissent from queried sentence tokens. Now I doubt that this penchant for verbal behavior, as opposed to meanings, is due to some kind of implicit naive "materialism" or "sensationalism". Rather it is due to the implicit (and correct) assumption that the predicate 'x dissents from (or assents to) token S at time t' is less obscure (in our sense) than the predicate 'S is analytic for x at time t'.

The reference to verbal behavior in connection with synonymy and analyticity pops up again when he says,

One quickly identifies certain seemingly transparent cases of synonymy, such as 'bachelor' and 'man not married', and sense the triviality of associated sentences such as 'No bachelor is married'. Conceivably the mechanism of such recognition, when better understood, might be made the basis of a definition of synonymy and analyticity in terms of linguistic behavior.²²

Now I think that we can all agree that the mechanism of such recognition is not understood by anyone at present. Moreover, in ordinary (i.e. unphilosophical) contexts we do use the word 'obscure' in reference to at least some

processes whose workings we don't understand. Thus it would seem that epithets such as 'obscure', 'unclear', 'dim', and 'mysterious' as applied to the process of recognizing analyticity is not out of place and is not the result of some idiosyncratic standard of clarity on Quine's part.

But if this is what he means by calling synonymy and analyticity obscure then I am puzzled as to why he doesn't find to be equally obscure and mysterious those behavioral criteria he is constantly hankering for. Consider some paradigm cases of "behavioral" or "empirical" terms; terms such as 'soft', 'round', and 'green' (about which, you recall, there was no trouble). To the best of my knowledge no one understands the mechanism by which we recognize two objects as having the same color (e.g. the same shade of green). Why should this process be considered less mysterious than the process by which we recognize that two predicates have the same meaning (and are thus synonymous)? Why should the process of seeing with one's eyes that two objects have the same color be considered as less obscure than the process of "seeing" with one's mind that two terms are synonymous (this latter process being one which we call 'understanding')?

There is the bare possibility that Quine's penchant for behavioral terms is merely a matter of taste and philosophical temperament. But, methodologically speaking, this is an explanation of last resort. Moreover, there is a more promising explanation of why empirically minded philosophers, including Quine, favor empirical terms; viz. these terms are

amongst the clearest (in our sense of clarity) that we have.

Thus, I can see no clear and plausible way of interpreting some of Quine's complaints about 'analytic', definable as "turnable into a logical truth by synonym substitution", other than to say that his charge consists, at bottom, of the claim that the notion of synonymy is very obscure (in our sense), and in particular, more obscure than behavioral or empirical terms.

(A friend of mine, in an epistemology class, handed out a list of sentences to his students with the instructions to determine, for each of them, whether they were analytic or synthetic. Every sentence on the list was extremely problematic with respect to this characteristic. The implicit purpose of this exercise seems to have been to exhibit the obscurity of the notion of analyticity.)

The question arises, however, of at what point along a scale of obscurity a predicate becomes too obscure to be acceptable. Perhaps Quine's standards of clarity are too high. This is, I think, an open question at this stage of philosophical progress (and a good one for further research). However, there does seem to be a presumption in favor of the claim that 'analytic' is too obscure to be a candidate for scientific utility. There are an embarrassingly large number of important sentences with the following characteristics: we believe them to be true, we don't want to justify them by appeal to experience, we don't know what to do to

gain evidence for the claim that they are analytic. In other words, 'analytic' is obscure at all these sentences. As examples I need only mention the axiom of infinity, the axiom of choice, and the claim, at least in the mouths of some, that people seek only what they think will give them happiness. The reader can doubtless conjure up his own favorite examples. We cannot explain our belief in the truth of these sentences by appealing to the fact that they are analytic because, since 'analytic' is obscure at these sentences, the claim that they are analytic is neither true nor false. Since so many interesting sentences are of this kind it is no wonder that the concept of analyticity is suspected of not being clear enough to be useful. Notice that this criticism would remain even if the difficulty discussed earlier were to be overcome (i.e. the difficulty involving the sense of 'explanation' used in the claim that the ascription of analyticity to the sentence "All bachelors are unmarried" **explains** either our belief in, or knowledge of, its truth).

A favorite way in which the friends of analyticity respond to the criticism that the notion of analyticity is obscure (in our sense) is to blame the obscurity of this notion on the obscurity of the words in the sentence at which analyticity is obscure. We will examine this response in Chapter 2. But before we do there remains another criticism of analyticity which needs to be looked at.

Section 5: Whether the Notion of Meaning is Needed to Describe Successful Translation and Communication

Another objection against the notion of meaning (in terms of which synonymy and analyticity can be defined) is that this notion is simply not needed to describe the successful translation of one language into another, and that it is also not needed to describe the process of successful communication. If this objection holds up, then it is but a short step to the further conclusion that meanings don't exist. For if a kind of entity is not needed in the service of our descriptive or explanatory purposes then nothing more is required as evidence for the claim that entities of that kind don't exist. Our only justification for the claim that electrons exist is the fact that appeal to electrons is required to describe and explain what we want to. (Notice, incidentally, that the claim that meanings don't exist is different from the claim that all sentences are synthetic, since one might hold the view that although meanings exist, no two expressions of the same language have the same meaning.)

The view that meanings are not needed is at the base of Quine's philosophy of language, as expressed in Word and Object, and elsewhere throughout his work. On this view the process of translation is one which is best described not as preservation of meanings but as preservation of reference. More specifically what is aimed at in a good translation from one language into another is not

intensional isomorphism but, at most, simply extensional isomorphism of a kind to be illustrated below. (Even extensional isomorphism may, for Quine, be too strong as an ideal (given his views on the inscrutability of reference) implying, as it does, the autonomy of syntax, i.e. the possibility of an independently ascertainable claim about the syntactical structure of a radically foreign language; "independently ascertainable" in the sense that the syntactic structure of the radically foreign language can be determined independently of theories about the reference of its component words and sentences. But the issue of the inscrutability of reference is not my concern here.)

An old fashioned pragmatic argument against the claim that meanings are needed to describe what goes on in the process of translation is implicit in Quine's view on the indeterminacy of translation. For example, in discussing propositions as the meanings of sentences he says this:

...if the posit of propositions is to be taken seriously, eternal sentences of other languages must be supposed to mean propositions too; and each of these must be identical with or distinct from each proposition meant by an eternal sentence of our own, even if we never care which. Surely it is philosophically unsatisfactory for such questions of identity to arise as recognized questions, however academic, without there being in principle some suggestion of how to construe them in terms of domestic and foreign dispositions to verbal behavior. ...For insofar as we take such a posit seriously, we thereby concede meaning, however inscrutable, to a synonymy relation that can be defined in general for eternal sentences of distinct languages as follows: sentences are synonymous that mean the same proposition. We would then have to suppose that among all the alternative systems of analytical hypotheses of translation which are compatible with the totality

of dispositions to verbal behavior on the part of two speakers of two languages, some are "really" right and others wrong on behaviorally inscrutable grounds of propositional identity. ...The very question of conditions for identity of propositions presents not so much an unsolved problem as a mistaken ideal.²³

A premise of the pragmatic argument implicit here is that a difference in meaning, in order to be a difference, has to make a difference in verbal behavior. Another implicit premise which Quine has often argued for is that alleged differences in meaning really don't show up in differences in verbal behavior.

On Quine's view, what a good translation preserves is not sameness of meaning but sameness of reference. As he puts it (here Quine is talking about an artificial language, although the point made applies equally well to either a foreign natural language or to expressions used by two speakers of the same language):

Being a new invention, the language has to be explained; and the explanation will proceed by what may be called formation and transformation rules. These rules will hold by arbitrary fiat, the artifex being boss. But all we can reasonably ask of these rules is that they enable us to find corresponding to each of his sentences a sentence of like truth value in familiar ordinary language.²⁴

In the view of those who believe in meaning, what a good translation preserves is meaning. An expression of a foreign language should have the same meaning as its translation into say, English. But, in line with Quine's view, one can make the claim that the most that need be required for one expression to be a good translation of another is that their extensions be the same. Take, for example, a simple

atomic sentence of the form 'a is an F'. A good translation of this sentence need be only an English sentence of the form 'b is a G', where 'b' refers to the same thing that 'a' does, and 'G' applies to the same set of things that 'F' does.

A good translation is, by definition, one which will enable us to communicate with the foreigner. The reason why sameness of reference is sufficient is because this is all that is needed to achieve successful communication. This can be seen in terms of an example. Suppose the foreigner tells me that all F's are dangerous. Suppose further that I have two translations of F which are different in meaning according to our intuitive semantics. According to the one translation F is to be translated as 'creature with a kidney', while the other one translates it as 'creature with a heart'. Supposing these last two English predicates to be coextensive, it then makes no difference which of these two translation I choose. If I take the foreigner's information to heart and flee from a creature with a kidney because I believe that it is dangerous, I will also be fleeing from a creature with a heart, and vice versa. And so the intuitive different in meaning between the coextensive predicates 'creature with a kidney' and 'creature with a heart' is a difference which makes no difference. I see no difficulty in the way of extending this basic idea to complicated expressions and to expressions which don't refer to observables.

Another interesting point to bring out in this connection is that ordinary talk about a lack of communication or a misunderstanding between two people as being due to a

difference in meaning which the two parties attach to a word will not support the philosopher's notion of meaning. If you look more closely at cases of what is called a purely verbal dispute you will find that what is really happening is merely that one person is using a word in such a way that it refers to something different than it does for the other person.

For example, if the ordinary person is disagreeing with the biologist's claim that no fish is a mammal he may eventually come to discover that the disagreement is a merely verbal one, which both the plain person and the biologist will describe by saying that they are using the word 'fish' to mean two different things. But all that this amounts to is that they are using the word 'fish' to refer to different things. The plain person is using the word in such a way that it includes whales in its extension, while the biologist is not. The moral is that ordinary language cannot be used to support the philosopher's more refined notion of meaning.

Chapter 2

Defenses of Analyticity

The purpose of this chapter is to examine various things which have been, or could be, said in defense of the analytic-synthetic distinction.

Section 1: Shifting the Blame for the Obscurity of 'analytic' onto Other Words

A prominent response to the criticism that 'analytic' is obscure is to "explain away" this obscurity in terms of the obscurity of the words in the sentence about whose analyticity we are in doubt. If, for example, we are in doubt as to whether the sentence 'All men are mortal' is analytic, and we don't know what to do to gain evidence for the claim that it is analytic, then it sounds plausible to say that this is due to the fact that 'man' (and perhaps 'mortal') is not completely clear, and that since most words of ordinary language are unclear to some extent it is no wonder that 'analytic' will be obscure at those sentences which contain such words.¹ This kind of response is made by Grice and Strawson in responding to Quine's complaint about the obscurity of 'analytic' at the sentence 'Everything green is extended'.

The indecision of 'analytic' (and equally, in this case, the indecision over 'true') arises, of course, from a further indecision: viz., that which we feel when confronted with such questions as "Should we count a point of green light as extended or not?" As is frequent enough in such cases, the hesitation

arises from the fact that boundaries of application of words are not determined by usage in all possible directions. But the example Quine has chosen is particularly unfortunate for his thesis, in that it is only too evident that our hesitations are not here attributable to obscurities in 'analytic'. It would be possible to choose other examples in which we would hesitate between 'analytic' and 'synthetic' and have few qualms about 'true'.²

The crucial part of their response comes when they go on to say:

But no more in these cases than in the sample case does the hesitation necessarily imply any obscurity in the notion of analyticity; since the hesitation would be sufficiently accounted for by the same or similar kind of indeterminacy in the relations between the words occurring within the statement about which the question, whether it is analytic or synthetic, is raised.³

In contrast to what Grice and Strawson say in the first part of this quotation we have already seen the sense of 'clear' in which 'true' is clear at the sentence 'Everything green is extended' while 'analytic' is not. What is relevant for our purposes here, however, is what they say in the second part of this quotation. When they say (without argument) that the hesitation over whether Quine's sample sentence is analytic is sufficiently accounted for by the indeterminacy in the relations between the words occurring in the sample sentence, what relations do they have in mind here? If the relation in question is that of meaning inclusion then they are just begging the question of the intelligibility of this relation. And if the relation is that of referent inclusion then indeterminacy in this relation is not sufficient to account for the indecision over whether the sample sentence

is analytic. For even if the relation of referent inclusion were not indeterminate there might still be hesitation over whether the sample sentence is analytic. In other words we would, in such a case, be sure of the truth of the sample sentence but be undecided over its analyticity.

This question deserves further discussion. For if we can successfully blame our lack of a search procedure for 'analytic' (i.e. at those sentences at which it is obscure) solely on the obscurity or unclarity of the words which occur in the sentence then we will be able to save the notion of analyticity from the charge of obscurity (in our sense of obscurity).

In Section 4 of Chapter 1 we defined what it means to say that a predicate is obscure at an object without regard to a distinction which it is now necessary to make, i.e. the distinction between extensional and intensional obscurity.⁴ A predicate is extensionally obscure to some extent if and only if there exist actual objects for which we don't know what to do to reduce an indecision about whether or not the predicate applies to these things. Here we use 'exist' in the timeless sense in which it means 'has existed, does exist, or will exist'.

A predicate is intensionally obscure to some extent just in case there are possible but non-actual objects for which we don't know what to do to reduce an indecision about whether or not the predicate applies to them.

Since non-actual objects don't exist, this definition, if taken literally, is useless. It is useless because the definiens says that there exist objects which don't exist. And because of this contradictoriness we can use the definition to conclude that no predicate is ever intensionally obscure. And if this were really the case then there would never be any indecision over the analyticity of any sentence. So let us not take the definition literally and instead try to paraphrase it into a more useful form.

The basic idea behind intensional obscurity is that a predicate is intensionally obscure to some extent if and only if there might be an object for which we don't know what to do to reduce an indecision over whether or not the predicate applies to the object. But to say that there might be such an object is just to say that it is possible that there is such an object. And the relevant sense of the expression 'it is possible that' is just as obscure as the notions of synonymy and analyticity which we are trying to rescue. This is no surprise since the relevant notion of 'possibility' is just the notion of logical possibility (to be distinguished from the narrower notions of physical and technical possibility).

Thus, since the notion of intensional obscurity ultimately presupposes a notion which is just as obscure as the notions of synonymy and analyticity it is hard to see what is being accomplished by appealing to the former notion as a way out of difficulties with the latter notions.

The question arises of whether the relatively unproblematic notion of extensional obscurity is ever sufficient to account for the obscurity of 'analytic'. (Notice, incidentally, that the obscurity of 'analytic' itself is extensional obscurity. The sentences at which 'analytic' is obscure are not merely possible sentences but actual sentences. This is so because we consider a sentence of spoken language as a sequence of phonemes; a sequence which exists even though no token of the sentence is ever uttered.⁵)

If 'analytic' is obscure at a sentence then we cannot conclude that the predicates in the sentence are extensionally obscure. However, if the predicates in a sentence are extensionally obscure to some degree or other then 'true' will also be obscure at that sentence. (As Quine puts it, "Attribution of truth...to 'Snow is white'...is every bit as clear to us as attribution of whiteness to snow.")⁶ In such a case 'analytic' will also be obscure at the sentence in question. But in general we cannot explain away the obscurity of 'analytic' at a sentence in terms of the extensional obscurity of the predicates in the sentence since there are sentences whose predicates are extensionally clear but at which 'analytic' is obscure.

In order to illustrate this point consider the sentence 'All men are mortal'. Let us assume, for the sake of this example, that the two predicates 'man' and 'mortal' are both extensionally clear. Let us further assume that we have amassed so many instances of things which are both men and

mortal that we are firm in our conviction that the sentence 'All men are mortal' is true. Yet it may happen that we are undecided over whether this sentence is analytically true. Suppose you are someone who is thus undecided. A defender of analyticity might want to blame this indecision on the obscurity of one of the two predicates in this sentence. He might say, for example, that your indecision is due to the fact that the predicate 'man' is not completely clear to you.⁷ But under our assumption that this predicate is extensionally clear, the kind of obscurity which the defender of analyticity is appealing to is intensional obscurity. This can be seen by considering the kind of things which a defender of analyticity might say to you in an attempt to decrease your indecision about whether it is analytically true that all men are mortal. He might say something like the following: "I know you don't believe that there actually are any immortal men but if there were an object which was in all respects like a man except that it was immortal would it still be a man?" To this question you might reply that if there were such an object then it would exist, and since all existent men are mortal it wouldn't be a man. At this point, the defender of analyticity, seeing that he didn't say what he intended to say, will try again. He might say something like the following. "Surely you can understand talk about non-existent objects. You do it all the time when you are reading fiction and telling fairy tales to your children. Now what I want to ask you is whether

there is a possible, but non-actual, object which has all the characteristics of a man except mortality but is nevertheless still a man (i.e. would you still call it a man)? Or, to put it another way, is it possible for there to be such an object which you would call a man?" To this question there are three answers you could give. You could say 'no', in which case the defender of analyticity will conclude that the sentence 'All men are mortal' is analytic for you. If you answer 'yes' then he will conclude that this sentence is synthetic for you. But you may say that you don't know whether you would call such an object a man. The defender of analyticity would then probably say that the reason you don't know is due to the fact that the concept of being a man is not completely clear to you. But clearly what he has in mind here is intensional obscurity, a notion which is no clearer than that of analyticity.

Now it is true that there are words which are extensionally obscure (witness 'bald'). The existence of such words will make the notion of truth extensionally obscure also. I don't want to deny that the notion of truth is obscure to some extent. At the moment I am concerned only to illustrate that the kind of obscurity which must be appealed to by those who attempt to explain away the extensional obscurity of 'analytic' is, in general, a different and much more problematic kind of obscurity than the kind of obscurity required to explain away any extensional obscurity of 'true'.

We have already mentioned that the question of how clear a predicate has to be to be acceptable is an open one. But since both 'analytic' and 'true' are predicates applicable to existent sentences we can ask the more manageable question of whether 'true' is (extensionally) clearer than 'analytic'. To say that it is is to say that every sentence at which 'analytic' is clear is also a sentence at which 'true' is clear, but that there are sentences at which 'true' is clear but at which 'analytic' is not. The first part of this claim can be shown by showing that there is no sentence whose truth we are undecided about (with no procedure for decreasing the indecision) but whose analyticity we are either sure about or have a procedure for decreasing the indecision. This can be shown in the following way.

Most of those who attack, and most of those who defend, the notion of analyticity would, I think, agree to the principle that if a sentence is analytically true (false) then it is true (false). Thus, if we believe that a sentence is analytically true (false) then we will believe that it is true (false). And if we know what to do to gain evidence for the claim that a sentence is analytically true (false) then we will know what to do to gain evidence for the claim that it is true (false). Also, it seems that if we believe it to be false that a sentence is analytic then either we will believe that it is true or believe that it is false or know what to do to gain evidence for the claim that it is

true. A counterexample to this last claim may seem to be provided by the sentence 'Stevenson is bald' (See Section 4 of Chapter 1 for the construction of this example.) It may seem that we believe it to be false that this sentence is analytic (in which case 'analytic' is clear at this sentence). And it is the case that we believe it to be neither true nor false that 'true' applies to this sentence and that we have no procedure for reducing the indecision (in which case 'true' is not clear at this sentence). But this is not really a counterexample since we don't believe it to be false that this sentence is analytic. What we do believe is that it is neither true nor false that this sentence is analytic. But from this we cannot conclude that we believe it to be false that this sentence is analytic. If someone asked us to give our opinion as to the truth value of the claim that this sentence is analytic we would give neither 'true' nor 'false' as an answer. Rather we would simply say that such a claim is neither true nor false. Thus, the sentence 'Stevenson is bald' is a sentence at which neither 'analytic' nor 'true' is clear.

In order to show the second part of the claim that 'true' is clearer than 'analytic' we need only to look at those sentences (such as 'Everything green is extended', as well as many others) at which 'true' is clear but 'analytic' is not.

Section 2: The Utility of Analyticity in an Ideal Language

There is a move which might be considered to be a defense, in some sense, of the notion of analyticity. The basic idea behind this move seems to be implicit in much of Carnap's work in the construction of artificial languages. Consider in particular the following passage in which Carnap is considering the construction of a formal language system.

Suppose he (i.e. the author of the system) wishes the predicates 'Bl' and 'R' to correspond to the words 'black' and 'raven'. While the meaning of 'black' is fairly clear, that of 'raven' is rather vague in the everyday language. There is no point for him to make an elaborate study, based either on introspection or on statistical investigation of common usage, in order to find out whether 'raven' always or mostly entails 'black'. It is rather his task to make up his mind about whether he wishes the predicates 'R' and 'Bl' of his system to be used in such a way that the first logically entails the second. If so, he has to add the (meaning) postulate ' $(x)(Rx \supset Blx)$ ' to the system, otherwise not.⁸

A preliminary comment that needs to be made here is that in constructing a formal language system the use of artificial symbols (such as 'Bl' and 'R') which are not predicates of a natural language is theoretically unnecessary. They are only used for expository and pedagogical purposes. In this passage 'Bl' and 'R' could be replaced by 'black' and 'raven' without affecting its content. I make this preliminary comment because it seems not to be understood by some philosophers who, not understanding it, proceed to dismiss formal philosophy as mere "symbol juggling" which has no relevance to philosophical problems. (Ryle, for example, in a review of

Carnap's Meaning and Necessity practically fulminates over Carnap's use of the word 'language' to describe his formal languages, and insists instead that they be called 'codes'.⁹ (If it is not the use of artificial symbols which bothers Ryle then what is the point of his insistence that Carnap's formalized languages be called 'codes'??))

The basic idea behind the thoughts in the quoted passage is that since natural languages have certain undesirable features, an ideal language bereft of these features would better serve philosophical purposes. One of the undesirable features of natural languages is the fact that there are too many sentences at which 'analytic' is obscure (in our sense). In an ideal language however, 'analytic' would be clear at every sentence of this language. A typical way to achieve this clarity is to give a recursive definition of 'analytic' for the sentences of this artificial language. This definition will be true by fiat, the artifex being boss. Thus there is no need to apply behavioral or sociological tests to discover pre-existing synonymies. Assuming then that every term used in the definition of 'analytic' for the formal language is itself clear, 'analytic' will also be clear at every sentence of the constructed language.

But the question I want to raise is this: why should there be any analytic sentences in an ideal language at all? Another way to put this question is to ask why an ideal language which has meaning postulates is better than one which doesn't? (It might conceivably be replied that this

question is irrelevant since it is the philosopher's task merely to explicate concepts, not to show why they are needed. But certainly if a concept is not philosophically or scientifically useful then there is not much point in explicating it.)

One answer to our question is that if we all spoke a language which was ideal to the extent that 'analytic' was clear at all its sentences this would eliminate the possibility of misunderstanding, miscommunication, and purely verbal differences of opinion. The way this would work would be as follows. Suppose you and I disagree over the truth of a sentence of the form 'All and only F's are G's'. If, upon calculation, it turned out that this sentence was analytic in the ideal language then any disagreement with it would indicate that the party who doubted its truth was speaking a different language (i.e. using one or the other of the predicates 'F' or 'G' in a different sense) than the one who believed in its truth. And thus the difference of opinion would be merely a verbal difference and not a disagreement about the "facts". To be more specific, suppose that I am speaking a language in which a biconditional of the above form is analytic, and that you disagree with the truth of this biconditional. On the view we are considering the situation would be described by saying that while we are perhaps both using 'G' in the same sense, you must be using 'F' in a different sense than I am. (This fits in well with our earlier doxological definition of an analytically

true sentence as one which is believed true in virtue of knowledge of meaning.)

But now how does this view square with our earlier admission that in order for successful communication to take place it is sufficient that you and I use 'F' in such a way that its extension turns out to be the same, and that sameness of sense which you and I attach to 'F' is not required? One answer is that these two views are compatible. It might be claimed that since sameness of sense guarantees sameness of reference, the requirement that you and I attach the same sense to a given word in our dispute merely guarantees that you and I are using 'F' in such a way that its extension is the same for both of us. On this view, while intersubjective coextensiveness of 'F' might occur without 'F' being intersubjectively synonymous this is not something which should be left to chance. The intersubjective coextensiveness should be guaranteed beforehand by the intersubjective synonymy. And this intersubjective synonymy is guaranteed in turn by the fact that we speak the same language, i.e. by the fact that the language I am speaking has all and only the same analytic sentences as the language which you are speaking.

The flaw in this view is contained in the previous sentence; i.e. in the assumption that if the language I speak has all and only the same analytic sentences as the language you speak then this is enough to guarantee the intersubjective synonymy of each of the terms we use. But as a matter of

fact it doesn't provide such a guarantee. From the fact that, e.g. a sentence of the form 'All and only F's are G's' is analytic in both of our languages it simply doesn't follow that I am using 'F', say, in the same sense in which you are using it. In other words, from the fact that 'F' and 'G' are intrasubjectively synonymous for both you and me it doesn't follow that 'F', say, means the same for me as it does for you. Intrasubjective synonymy of 'F' with 'G' doesn't guarantee intersubjective synonymy of either 'F' or 'G'. Thus, the purposes of increasing the effectiveness of communication and reducing misunderstanding are not served even if we spoke an ideal language at all of whose sentences 'analytic' is clear. And it is difficult to see what other purposes might be served by speaking such a language.

Section 3: Carnap's Empirical Criterion of Synonymy

The purpose of this section is to examine an empirical criterion of synonymy given by Carnap in his article "Meaning and Synonymy in Natural Languages"¹⁰ In this article Carnap asks us to imagine a situation in which we have two field linguists investigating the linguistic responses of a German speaker by the name of Karl. The dispute between the two linguists is whether Karl's word 'Pferd' should be translated as 'horse' or as 'horse or unicorn'. Carnap then says:

Suppose, for example, that one linguist, after an investigation of Karl's speaking behavior, writes into his dictionary the following:

(1) Pferd, horse

while another linguist writes:

(2) Pferd, horse or unicorn

Since there are no unicorns, the two intensions ascribed to the word 'Pferd' by the two linguists, although different, have the same extension. If the extensionalist were right, there would be no way for empirically deciding between (1) and (2).¹¹

Carnap then goes on to argue for the claim that there is a way for empirically deciding between (1) and (2) as translations of 'Pferd'.

But before we go any further there is already a difficulty for a Quineian. In the very description of the testing procedure the intelligibility of the notion of intralinguistic synonymy is presupposed by the claim that 'horse' is not synonymous with 'horse or unicorn'. Does Carnap think that those who demand a behavioristic criterion for synonymy require it only for the case of interlinguistic synonymy? Perhaps not. Perhaps Carnap set up the situation in this way only for pedagogic purposes.

(Whatever Carnap's intent it may be worthwhile to mention, in passing, that the one "kind" of synonymy is neither more nor less problematic than the other. To say, for example, that synonymy of two terms within a natural language is less problematic than synonymy of terms between two natural languages is like saying that we can understand what it means to say that two cars have the same weight but that we don't understand what it means to say that some car has the same weight as some boat. The fact that most people

implicitly consider intralinguistic synonymy to be less problematic than interlinguistic synonymy is illustrated by the fact that Quine has found it pedagogically useful to argue for the unintelligibility of any kind of synonymy by using the extreme example of translation from a language like English into a radically foreign language.)

At any rate we can avoid the presumption of the intelligibility of intralinguistic synonymy by changing the testing procedure from the way Carnap has described it. We can just consider the test as a criterion for whether or not 'Pferd' is synonymous with horse. Let us suppose then that the two linguists are agreed that 'Pferd' is coextensive with 'horse', but that they disagree over whether these terms are synonymous.

Since, as Carnap points out, the extension of 'Pferd' and 'horse' is the same, no response by Karl, affirmative or negative, with respect to any actual thing will reveal whether or not these two predicates are synonymous. We must, he says, take into account not only the actual cases, but also possible cases. We do this by getting Karl to consider kinds of things which have no instances and then ask him whether he would be willing to ascribe the predicate 'Pferd' to things of those kinds. As Carnap says, the linguist must investigate Karl's responses not only to cases believed by Karl to be physically possible, but also to cases believed by Karl to be logically possible (though perhaps not physically possible, i.e. ruled out by the laws of nature which Karl believes to hold).

Suppose that one of the things that we get Karl to consider is a thing like a horse but with a horn in the middle of its forehead. What the linguist wants to find out is whether Karl considers it logically possible for a thing of this kind to be a Pferd. If he does consider it to be logically possible then this is evidence that 'Pferd' is not synonymous with 'horse', and if he doesn't consider it to be logically possible then this is some evidence that 'Pferd' is synonymous with 'horse'. But how is the linguist supposed to discover Karl's views on whether he considers it logically possible for a thing of the described kind to be a Pferd? Carnap suggests that the linguist should accomplish this by putting to Karl the German equivalent of the question 'Is it logically possible for a thing of this kind to be a Pferdⁱ'. But this has the consequence that the linguist must have evidence that some particular German expression is synonymous with the English expression 'logically possible'. And how will he gather this evidence? It is hard to see how he can use the criterion under discussion since this criterion presupposes that we already know what German expression is synonymous with 'logically possible'.

Carnap seems to provide an answer to this objection when he says that it is not necessary to put these modal questions to Karl in German. He says that the linguist can merely get Karl to consider things, by the use of pictures, for example, which the linguist knows to be

logically possible, and then ask Karl the question 'Pferd?'. But the question 'Pferd?' is ambiguous. It can mean either 'Is it physically possible for a thing of this kind to be a Pferd?' or 'Is it logically possible for a thing of this kind to be a Pferd?'. (Perhaps Carnap is implicitly assuming the false principle that if you show a picture of something to Karl then Karl will not believe that it is physically impossible for the thing pictured to be a Pferd.) So in order to avoid the ambiguity of the question 'Pferd?' it seems that the linguist has to put the appropriate modal question to Karl in German after all. And in order to do this the linguist must learn a great deal of German. I say 'a great deal' because the notion of logical possibility (i.e. analytic impossibility), being a technical notion, must be taught to Karl. And in order to teach him this we must be able to give him examples (e.g. the German equivalents of 'bachelor' and 'unmarried man', etc.) along with the German equivalents of all the other things we say when we are trying to explain to English speaking students the notion of analytic impossibility. But Carnap's proposed test for synonymy is, in effect, supposed to be a method for learning German (i.e. it is a method for finding out what German expressions are synonymous with what English expressions).

Thus Carnap's proposed criterion for synonymy appears to be subject to a kind of circularity. In order to apply the synonymy criterion we must already know what it is

supposed to give us, i.e. knowledge of a great many of the English-German synonymy relata.

This circularity can be avoided if Carnap's criterion is applied only to those German expressions knowledge of whose English synonyms is not required in order to apply the criterion. If we thus limit the criterion by excluding, on pain of circularity, its applicability to a certain class of German expressions, and if the linguist must know the English synonyms of the expressions in this excluded class in order to apply the criterion to German expressions outside of this class, then the question arises of how the linguist is to gain knowledge of the English synonyms of the German expressions in the excluded class.

One answer is that the linguist can "go native", i.e. he can learn the use of the expressions in the excluded class in the same way that a native born German child would. Afterwards he can then, without circularity, apply Carnap's criterion to the non-excluded class of German questions by putting, in German, the appropriate modal questions to Karl (utilizing, of course, only those German expressions which the linguist learned by going native, i.e. those expressions in the excluded class).

The upshot of restricting Carnap's criterion in the way we have described is that the linguist must somehow come to know some of the English-German synonymy relata before he can use Carnap's test for getting evidence of other English-German synonymy relata.

It is instructive to compare Carnap's test for synonymy with intelligence tests. One respect in which they are similar is that just as the linguist must understand the concept of analyticity so also must the designer of the intelligence test understand the concept of intelligence. A point of dissimilarity is that while Karl must understand the notion of analyticity in order for Carnap's test to be successfully applied to him, the one who takes an intelligence test need not understand the concept of intelligence.

The fact that the linguist must understand the notion of analyticity does not constitute a good objection to Carnap's criterion. This can be seen by analyzing the situation with respect to intelligence tests, these tests being ones which we normally consider to be empirical or behavioristic. While the factors which constitute what we call intelligence are complex we do routinely make estimates of people's intelligence. Moreover, a good estimate of intelligence requires that a great deal of time be spent, in many different contexts, with the person whose intelligence we want to estimate. So called I.Q. tests are intended as just a short cut method for getting this estimate. The effectiveness of the test is judged by the extent to which it gives the same output (i.e. who is intelligent to what degree) as the more time consuming method. If the tests were completely accurate then the expressions 'is intelligent' and 'gets a high I.Q. score' would indeed be coextensive, but they still wouldn't be synonymous, i.e. they wouldn't

mean the same thing. (This point is not understood by those who, in their eagerness to be "scientific", want to define 'is intelligent' as 'gets a high I.Q. score'. They sometimes express this view by saying that intelligence is that which is measured by I.Q. tests (a statement which, under the assumption of complete accuracy of the tests, is true if the first 'is' is interpreted as synthetic identity, but false if it is interpreted as an analytic identity).)

The moral of this comparison between Carnap's criterion and I.Q. tests is that not all empirical tests for the application of a predicate are supposed to provide us with the meaning of the predicate, or to make an originally meaningless predicate meaningful. If we did view such tests as procedures which make an originally meaningless predicate meaningful then we would invite the justifiable complaint that while we understand what objects the result of the test attributes the predicate to, we don't understand what is being attributed to them.

From a behavioristic standpoint, however, it might be considered to be objectionable that Carnap's criterion for synonymy requires that Karl also understand the notion of analyticity. This kind of objection is characteristic of those who like to style themselves as behavioristic. The behavioristic ideal often seems to presuppose that the subjects of an ideal behavioristic theory be considered as being as bereft of human understanding as an electron or a stone, and that consequently concepts such as that of

understanding are not legitimate parts of an ideal behavioristic theory.

But fortunately for our purposes the question of exactly what it means to be behavioristic, along with the pros and cons of behaviorism, can be avoided. The reason is that Quine's request for a behavioristic criterion of synonymy is, as I have interpreted it, merely a request for what I have in Chapter 1 called a search procedure for the application of the predicate 'synonymous', which will enable us to gather evidence for synonymy claims which we didn't have before the introduction of the criterion.

Now it might seem as though Carnap has achieved this goal at least to some extent, i.e. with respect to those words which do not belong to what I have called the excluded class. We have, for example, the word 'Pferd', and we have no idea whether or not it is synonymous with 'horse'. We then apply Carnap's criterion to gain evidence for or against the claim that it is so synonymous.

But it seems to me that this is somewhat of a hollow achievement, and that Carnap's criterion doesn't really provide what Quine is asking for. What he is asking for is greater clarity of the predicates 'synonymous', 'analytic', and the like, as applied to expressions in our own language as well as that of other languages. This means that Carnap's criterion should be evaluated on the basis of this question: given that one knows the language

(or at least the meanings of the words to which the criterion is to be applied) as well as anyone, does the criterion help us to gather evidence for or against a synonymy claim which we didn't have before the introduction of the criterion? As applied to Carnap's criterion the answer to this question is clearly negative. Quine would point out that application of Carnap's criterion to the sentence 'Everything green is extended' will not help in deciding whether or not this sentence is analytic. And so also with any other sentence, of a language we know, about whose analyticity we are in the dark.

So, in spite of the fact that we can partially avoid the circularity criticism mentioned earlier, we have to conclude that Carnap's criterion doesn't provide the increased clarity that Quine is looking for.

Section 4: Grice and Strawson's Understanding-Believing Criterion of Analyticity

Let us turn now to another proposed criterion for the application of analyticity to the sentences of a natural language. This criterion, as given by Grice and Strawson, turns on the distinction between not understanding a sentence and not believing it.¹² The basic idea is that an analytically true sentence is one whose negation we don't understand, while a synthetically true sentence is one whose negation we do understand even though we may not believe, or assent to, it. This definition, as it stands, needs amendment.

Otherwise every sentence of a language foreign to us will be analytically true since every such sentence is one whose negation we don't understand. So let us say that an analytically true sentence is one which we understand but whose negation we don't understand.

Grice and Strawson have this to say about the distinction between not believing a sentence and not understanding it.

It would be rash to maintain that this distinction does not need clarification; but it would be absurd to maintain that it does not exist. In the face of the availability of this informal type of explanation for the notions of the analyticity group, the fact that they have not received another type of explanation (which it is dubious whether any expressions ever receive) seems a wholly inadequate ground for the conclusion that the notions are pseudo-notions, that the expressions which purport to express them have no sense.¹³

Another advantage claimed for this explanation by Grice and Strawson is that it breaks out of the family circle of terms which Quine objects to; terms like 'possible', 'meaning', 'synonymous', 'necessary', 'semantical rule', 'meaning postulate', and 'analytic', all of which, according to Quine, are equally obscure. Grice and Strawson don't clearly explain what they mean by breaking out of the family circle of terms. If they merely mean that their informal explanation doesn't explicitly utilize any of the terms which Quine has "officially" objected to, then their claim is true but uninteresting. The more interesting question is whether their explanation implicitly utilizes the disreputable notions. At first glance it doesn't seem to. To not understand a sentence is, on one view, to not know what to

do to gain evidence for its truth. To understand a sentence but not believe it is to know what to do to gain such evidence but to expect that if one attempts to gather such evidence it will show that the probability of the sentence being false is equal to or greater than that of its being true. (To simplify matters I am ignoring the fact that both evidence and belief is a matter of degree.) But the distinction between not understanding a sentence and not believing it does implicitly presuppose the notions to which Quine objects. This can be seen as follows.

Let us apply what I will hereafter call the understanding-believing criterion to the sentence 'All bachelors are unmarried'. Its negation is equivalent to 'There is a married bachelor'. To understand this latter sentence is to know what to do to gain evidence for its truth. Do we know what to do to gain evidence for its truth? One answer is 'Yes, look for a married bachelor'. An answer to the question of how we are to go about looking for a married bachelor, which is in line with positive aspects of Quine's philosophy of language, might go something like this. Use a questionnaire method and ask people both whether they are a bachelor and whether they are married. If perchance we should find someone who says that he is both married and a bachelor what should we conclude? That we have found a married bachelor, or that our informant is using the words 'bachelor' and/or 'unmarried' in a different sense than most of us do? No doubt we would say the latter, as Grice and Strawson have done in a similar

example.¹⁴ But then we are invoking the notion of sense or meaning. Moreover, what can we say about the sense in which most of us use the word 'bachelor'? All we can say, it seems, is that we use the word 'bachelor' in the sense that all bachelors are unmarried. This amounts to truth by fiat as applied to the sentence 'All bachelors are married'. For emphasis we might add that we are using the word 'bachelor' in the sense which implies being unmarried, or which has being married as part of its very meaning, or in the sense that it is impossible for a person to be both married and a bachelor.

Thus, in spite of appearances to the contrary, it seems that the understanding-believing criterion doesn't really break out of the circle of terms which Quine objects to after all.

Section 5: The Existence of Analytically True Sentences

In this section I would like to examine various things which have been, or might be, said in answer to the question "What guarantee do we have that any given sentence of a natural language is analytically true?".

One guarantee that there are analytically true sentences might seem to be provided by the paradigm case argument. There are two uses of such an argument. One of them was discussed in Section 4 of Chapter 1. This use of the argument, which we considered to be sound, consisted of showing that 'analytic' is meaningful; i.e. that there is a rule, no

matter how implicit, guiding our use of the word 'analytic'. Let us call this kind of argument a 'proof of meaningfulness paradigm case argument'. There is however, another and more traditional use of the paradigm case argument which we may call a 'proof of existence paradigm case argument'. This kind of argument, as applied to the predicate 'analytic' is designed to show that analytic sentences exist. I will be concerned here only with the latter kind of argument.

As Quine points out sentences such as 'All bachelors are unmarried', 'everything is self identical', and every sentence of the form 'p or not p' have a feel that everyone appreciates,¹⁵ and which seem to be different in kind from sentences such as 'All bachelors are over two feet tall' and 'Everything is self loving'. If we want to, we can invent a word, say 'analytic', which we apply to sentences of the first kind, and if someone asks us what 'analytic' means we can point to sentences of that kind as examples of what we take 'analytic' to refer to. If this is all we do then the question of whether there are analytic sentences is out of place. But then it will be a further, and distinct, question of whether analytic sentences have the properties traditionally attributed to them; i.e. the properties of being true purely in virtue of meaning, or of being believed true in virtue of knowledge of meaning, or of being true in all worlds, or even of being true. And whether or not sentences such as 'Everything is self identical' have these properties is something that the proof-of-existence paradigm case argument cannot prove.

Alternatively, we can define 'analytic' as meaning, say, 'true in virtue of meaning', or 'believed true in virtue of knowledge of meaning'. But then it will be a further question of whether there are any sentences which have the properties invoked in the definition.

But we can't have it both ways. That is, we can't use the proof-of-existence paradigm case argument to simultaneously prove both that analytic sentences exist and that they have the properties traditionally ascribed to them. Nor can this be accomplished by using the proof-of-existence paradigm case argument in tandem with the proof-of-meaningfulness paradigm case argument. For all that the latter kind of argument shows is that there is some rule, not matter how implicit, guiding our use of the word 'analytic', not that analytic sentences have the properties traditionally attributed to them.

The situation with 'analytic' is similar to that of 'witch'. We can use the proof-of-existence paradigm case argument to prove that there were once witches. But we don't thereby prove that they have the powers traditionally ascribed to them. Alternatively, we can define 'witch' to mean 'someone with supernatural powers etc.' But then it will be a further question whether there ever were any witches.

I prefer to take the second kind of alternative with respect to 'analytic'; i.e. to take 'analytic' to be defined by the various things which have been said about analytic sentences, and then consider it a further question as to

whether there are any sentences of the kind so defined.

One of the properties ascribed to analytically true sentences by the definition considered in Section 1 of Chapter 1 is the property of being true purely in virtue of meaning. This means that for such a sentence, given that it has the meaning which it does, it follows that it is true. In other words, its meaning guarantees that it is true. Let us try to see whether the sentence 'Everything is self identical' has this property. Since this sentence has, of course, the meaning which it does have the question is then whether this sentence is therefore guaranteed to be true. We have no such guarantee if it is possible for some person to come up with a theory which has great explanatory and predictive power and which has as one of its components the claim that there are some things, strange theoretical particles for example, which are not self identical. The claim that this is not possible, and that therefore we have a guarantee that 'Everything is self identical' is true might be considered to be supported by the claim that the sentence in question has a property attributed to it by what we have called in Section 3 of Chapter 1 the doxological definition of analyticity; i.e. the property of being believed true in virtue of knowledge of meaning. In other words it might be claimed that the sentence in question is guaranteed to be true since if anyone did come along with a theory of the kind mentioned above this would merely show that he is using the predicate 'is identical with' in a different sense

from, i.e. he doesn't understand it in the same way as, the sense which this predicate now has. And since this is so, so the claim goes, this guarantees that the sentence 'Everything is self identical', with the meaning it now has, is true. Moreover this shows that it is immune from revision, provided only that its meaning doesn't change.

But now the question shifts to whether or not the sentence in question does have the property attributed to it by the doxological definition of analyticity? That is, if someone believed and put forward the strange particle theory would we have to conclude that he is using 'is identical with' in a different sense, or with a different meaning, than it now has? Here we have a question of the intersubjective synonymy of the predicate 'is identical with'; i.e. does the proponent of the strange particle theory attach a different meaning to this predicate than we do? If the answer is 'yes' then we can conclude that the sentence 'Everything is self identical' is guaranteed to be true and that it is analytically true. If the answer is 'no' then we can conclude not only that the sentence in question is not analytically true, but if there is a great deal of evidence (albeit indirect) to support the strange particle theory then we will also conclude that the sentence in question is false. Well, what is the answer to this question of intersubjective synonymy? Quine's answer, to paraphrase him from a slightly different context, is that this question represents not so much an unsolved problem as a mistaken

ideal.¹⁶ This Quineian view seems to be buttressed by our earlier considerations involving what we have called the obscurity of the notion of synonymy. For a likely answer to the question of the intersubjective synonymy of 'is identical with' is neither 'yes' nor 'no' but rather 'I don't know and I have no way of finding out', in which case the claim that 'is identical with' is intersubjectively synonymous is neither true nor false.

But suppose that someone claims that the proponent of the strange particle theory must be using 'identical with' in a different sense than we do. He might even say, in support of this claim, that by 'identical with' we just mean that relation which holds between everything and itself, and that anyone who says that there are things which are not self identical must mean something different by 'identical with' than we normally do.

But suppose that the strange particle theory turns out to be very successful in explaining and predicting what we want it to. We would have to conclude that the strange particle theory is true. Under these assumptions a question would then seem to arise. If the proponent of the strange particle theory is not using 'identical with' in the same sense that we do then in what sense is he using it? Another way to put this question is to ask whether his utterance is translatable into a sentence whose meaning we already understand. Suppose it isn't. Then we will have to say that there are truths which we don't understand. Since as both

Carnap and Quine stress, analytic truth as well as truth is relative to a language we can still say that in our language the claim that everything is self identical is analytically true, and therefore true, and that the claim that 'Some things are not self identical' is analytically false, and therefore false, in our language. But I don't think that we, ever seeking the truth, would take much solace in this. Instead, we would be more inclined, I think, to take a cue from Carnap when he says that languages are to be judged on the basis of their fruitfulness and utility. And if so, then we will be inclined to say that the language of the scientist is more fruitful than our language. But this counsel will be just a source of frustration unless it is possible for us to learn the language of the scientist. I am willing to grant that since we have assumed that the scientist's language (i.e. the relevant part of it) is not translatable into ours, we do not, as of now, understand the language of the scientist. But the question is whether we could come to learn his language. I see no reason why not. Just as the plain man starts out not understanding the negation of the parallel postulate in geometry, (indeed he might even claim that it is impossible for it to be true), nor the claim that space is curved, nor the claim that some things are neither waves nor particles, but can come to understand them by learning the language of physics-mathematics so also we can come to understand the language used by the scientist within which he claims that some things are not

self identical. To understand a sentence is to know what to do to gain evidence for it. In the case of the highly theoretical sentence in question this means that we know how to use it, in combination with other sentences, as part of a theory from which we can derive testable consequences. And if the proponent of the strange particle theory can do this then so can we come to learn to do it.

Since we have no guarantee that the events described in this little story won't happen so also we have no guarantee that our present language (in which we have, for the sake of argument, assumed that it is analytically true that everything is self identical) will remain adequate and fruitful as a means for explaining and predicting events in the world.

There is a third possibility yet to consider. Suppose that the utterance of the scientist is translatable into a language we already understand but that its translation is not any of the sentences in our language which we consider to be analytically false. This would not require us to give up any sentence of our language which we consider to be analytically true, in particular the sentence 'Everything is self identical'.

Now if we are to have a guarantee that this sentence is true then we would have to argue that this third possibility is the only real possibility with respect to the story of the strange particle theory. If, on the other hand, the utterance of the scientist (which, we have assumed, has a great deal

of evidence in favor of its truth on the grounds of its explanatory and predictive power) is translated into our language as 'There are some things which are not self-identical' then the claim that everything is self identical is not guaranteed to be true. And if his utterance is not translatable into any sentence of our language then there is, I suppose, a sense in which it could be said that in our language the sentence 'Everything is self identical' is guaranteed to be true. But then since we would have to conclude that our present language is inadequate such a guarantee would, I suspect, lose its interest.

I know of no good argument for the claim that in the context of our little story the third possibility is the only real possibility. I know of no good argument for the claim that our present language is guaranteed to be adequate to any possible future development in our attempts to explain and predict phenomena. I also don't know of any good argument for the claim that if the scientist of our story disagrees with the claim that everything is self identical then he must be using these words to mean something different than we do. Indeed we can even imagine a situation in which the scientist claims that his strange particles are not self identical and in which he is not using these words to mean something different than we do. Consider the following conversation. Scientist: My successful theory has, as a part, the claim that certain strange particles are not self identical. Friend of analyticity: Well then you must mean

something different by 'identical with' than I do. You must be speaking a different language than I am, since by 'identical with' I just mean that relation which exists between everything and itself. Scientist: You are overworking the word 'mean'. When you first learned the notion of logical or numerical identity your teachers had to distinguish between this notion and that of, say, genidentity or between logical identity and qualitative identity. And in order to do this they said that logical identity is "defined" as that relation which exists between everything and itself. But they too were overworking the words 'mean' and 'define'. All they were really doing was teaching you the notion of logical identity by reference to their belief that everything is self identical (a belief that I have good reason to think is false). But since the truth of their belief was not necessary in order for you to come to understand the notion of logical identity you came to understand this notion in spite of the falsity of their belief. I too originally came to understand the notion of logical identity in the way that you did. And when I claim that not everything is identical I am using 'identical with' in the same sense that you are. Indeed I can even say that I am using 'identical with' in the sense in which you (falsely) believe it to hold of everything.

FOA: All right. I will, at least for the sake of argument, grant that you are using these words in the same sense that I am. But still there is a sense in which I don't understand

what it means to say that these strange particles of yours are not self identical.

S: But if you understand what it means to say that everything is self identical, and you also agree with the principle that if you understand a sentence then you understand a sentence which is equivalent to its negation then you will have to agree that you understand what it means to say that some things are not self identical.

FOA: Well, in this case I think that I might give up the applicability of the principle to analytically true sentences. For such sentences I think that even though I understand them I don't understand their negations.

S: You are right. There is a sense in which you don't yet understand what it means to say that these strange particles are not self identical. This sense is hard to pinpoint, but it seems to be hinted at in Wittgenstein's dictum that the meaning of an expression is its use in the language. And admittedly you do not, as yet, understand the use of the claim that strange particles are not self identical. That is, you do not understand how to use this claim, in conjunction with other sentences, in order to derive successful predictions of phenomena. But I can teach you how to do this.

Since we have no guarantee that the events described in this dialogue won't happen we also have no guarantee that the sentence 'Everything is self identical' is analytically true, and thus true.

(Incidentally, since the events described in this dialogue are not incomprehensible, and since the scientist in the story could be described, by our present lights, as an "illogical" person, if anyone could, Quine seems to be wrong when he says that the doctrine of there possibly being illogical peoples (he uses the word 'prelogical') is meaningless. Quine says that illogicality is a trait injected by bad translators.¹⁷ Moreover, if we do accept Quine's view that illogicality is a trait injected by bad translators, and if we also assume that our language will always be adequate, then we can be guaranteed that no obviously analytically true sentence of our present language will be shown to be false. For if every utterance of any possible future scientist is destined not to be translated into a sentence of our present language which we consider to be obviously analytically false (on the grounds that such a translation would be the best evidence that we could have that the translation is a poor one) then those sentences which we consider to be obviously analytically true are immune from refutation. And thus we could be assured that such sentences are true purely in virtue of their meaning; i.e. we could be assured that their truth follows from the fact that they have the meaning which they do have.)

We have been assuming that, at least for some sentences S, the friends of analyticity require that sentences of the form 'S is analytically true' be guaranteed to be true, and thus that S be guaranteed to be true (provided, of course,

that its meaning remains constant). But have they accepted such a requirement? And do they need to? Historically, it would seem that the friends of analyticity have implicitly accepted this requirement. Analytically true sentences were supposed to be, in some sense, necessary. They were also supposed to be known a priori. (And thus, since they could be known independently of experience, no experience could refute them. And since no possible experience could refute them they were guaranteed to be true.) But all of this could conceivably be accommodated to the view that no given sentence of the form 'S is analytic' is guaranteed to be true. One could imagine a philosopher holding the view that all the friends of analyticity need be committed to whether they realized it or not) are the hypothetical claims that if a sentence is analytically true then it is known a priori, and if a sentence is analytically true then it is necessary, and if a sentence is analytically true then it has no content, etc., etc. Such a philosopher might express the view that no sentence of the form 'S is analytic' is guaranteed to be true by saying that no sentence of this form is necessary, or analytic, or known a priori. He might say that all a philosopher should be concerned with is analyzing the notion of analyticity and relating it to other notions, but not with making or proving any claim of the form 'S is analytic'.

I can imagine someone taking this 'if p then q' view of philosophical activity. It has its metaphilosophical

attractions, not only with respect to the notion of analyticity but also with respect to other notions philosophers are prone to analyze. Whether it could be maintained as a general view of what philosophical activity should be, without ultimately invoking spurious distinctions and question begging assumptions, is a difficult question. For our purposes however, it is sufficient to point out that if the friends of analyticity are not concerned with maintaining the view that apparently analytic sentences are guaranteed to be true then it is hard to see what motivates the philosophical interest in analyticity.

Historically speaking, there is little doubt that the friends of analyticity have considered apparently analytic sentences such as 'Everything is self identical' and sentences of the form 'p or not p', for example, to be guaranteed to be true. This is reflected in the fact that such sentences were said to be necessarily true and couldn't possibly fail to be true. The claim that such sentences couldn't possibly fail to be true was considered to be justified by the claim that these sentences were analytic. But, as we saw in an earlier section, the claim that a sentence is analytic is not a good justification for the claim that it is true. Moreover, the friends of analyticity will have to deal not only with this negative criticism but also with the positive criticism, contained in the story of the strange particle theory, which claims that it is possible for an apparently analytic sentence to be false. They would also have to deal

with the possibility that our present language might turn out to be inadequate (in the sense described earlier) to future developments in science.

Section 6: Analyticity by Fiat and Truth by Convention

The purpose of this section is to see to what extent the notion of analyticity by fiat and truth by convention can be used to defend the notion of analyticity against the objections already mentioned in this work.

Suppose we introduce 'E' as an abbreviation for 'the smallest prime number between 12 and 100'. We can view this as introducing, by fiat, a relation of synonymy between these two expressions. And since sameness of sense implies sameness of reference it follows that these two expressions have the same reference, and thus that the sentence formed by placing '=' between these two expressions is true. Its truth is guaranteed by the fact that the synonymy was created by fiat, along with the truth of the principle that sameness of sense implies sameness of reference. Alternatively we could guarantee the truth of the identity directly in the same manner that the truth of meaning postulates are guaranteed in an artificial language, i.e. by just declaring by fiat that it shall be true. This would be a case of what Quine calls "legislative postulation". The former move would be a case of what he calls "legislative definition", to be distinguished from what he calls "discursive definition", the latter notion being a case of a statement of definitional

form which "sets forth a pre-existing relation of interchangeability or coextensiveness between notations in already familiar usage".¹⁸

In "Two Dogmas" Quine had seemed to endorse the notion of synonymy when it is created by fiat in the case of explicit conventional notational abbreviation.¹⁹ In his later work, however, he set forth a view in the context of which his earlier endorsement is seen to give little aid to the friends of analyticity. Quine's later views are best set forth in his own words.

Definition, in a properly narrow sense of the word, is convention in a properly narrow sense of the word. But the phrase 'true by definition' must be taken cautiously; in its strongest usage it refers to a transcription, by the definition, of a truth of elementary logic. Whether such a sentence is true by convention depends on whether the logical truths themselves be reckoned as true by convention. Even an outright equation or biconditional connecting the definiens and the definiendum is a definitional transcription of a prior logical truth of the form ' $x=x$ ' or ' $p \equiv p$ '.

Definition commonly so called is not thus narrowly conceived, and must for present purposes be divided, as postulation was divided, into legislative and discursive. Legislative definition introduces a notation hitherto unused, or used only at variance with the practice proposed, or used also at variance, so that a convention is wanted to settle the ambiguity. Discursive definition, on the other hand, sets forth a pre-existing relation of interchangeability or coextensiveness between notations in already familiar usage. A frequent purpose of this activity is to show how some chosen part of language can be made to serve the purposes of a wider part. Another frequent purpose is language instruction.

It is only legislative definition, and not discursive definition nor discursive postulation, that makes a conventional contribution to the truth of sentences. Legislative postulation, finally, affords truth by convention unalloyed.

Increasingly the word 'definition' connotes the formulas of definition which appear in connection with formal systems, signalled by some extrasystematic sign such as '=df'. Such definitions are best looked upon as correlating two systems, two notations, one of which is prized for its economical lexicon and the other for its brevity or familiarity of expression. Definitions so used can be either legislative or discursive in their inception. But this distinction is in practice left unindicated, and wisely; for it is a distinction only between particular acts of definition, and not germane to the definition as an enduring channel of inter-translation.

The distinction between the legislative and discursive refers thus to the act, and not to its enduring consequence, in the case of postulation as in the case of definition. This is because we are taking the notion of truth by convention fairly literally and simple-mindedly, for lack of an intelligible alternative. So conceived, conventionality is a passing trait, significant at the moving front of science but useless in classifying sentences behind the lines. It is a trait of events and not of sentences.

Might we not still project a derivative trait upon the sentences themselves, thus speaking of a sentence as forever true by convention if its first adoption as true was a convention? No; this, if done seriously, involves us in the most unrewarding historical conjecture. Legislative postulation contributes truths which become integral to the corpus of truths; the artificiality of their origin does not linger as a localized quality, but suffuses the corpus. If a subsequent expositor singles out those once legislatively postulated truths again as postulates, that signifies nothing; he is engaged only in discursive postulation. He could as well choose his postulates from elsewhere in the corpus, and will if he thinks this serves his expository ends.²⁰

With respect to our example about 'E', some of these views of Quine can be illustrated as follows. After introducing 'E' as an abbreviation it will start appearing in other statements which we believe to be true. Its abbreviatory nature and the artificiality of its origin will be forgotten. Later on we may find it useful, in our

attempts to explain the world, to retain some of the statements in which 'E' occurs but to reject, as false, the sentence 'E= the smallest prime number between 12 and 100'. Here we have an expression of the Quineian view even if an expression is initially introduced as an abbreviation it will become subject to Quine's "law" that an expression does not have meaning in isolation from its fellows.

The distinction between the discursive and the legislative is a good one. But the substantive views of Quine, as expressed in this quotation constitute merely a begging of the question of the desirability of making a sharp distinction between the analytic and the synthetic. These views gain their plausability because they seem to be accurate descriptions of people's actual linguistic behavior. The friends of analyticity are just as willing as anyone else to admit that as a matter of fact scientists, as well as others, have not, in the past made a sharp distinction between discursive and legislative definition, and that even if they were to institute a truth via legislative definition this fact would be lost sight of in the subsequent development of their science. But to say, as Quine does, that it is wise to continue this practice is just to make the question begging claim that it is unwise to make a sharp distinction between the analytic and the synthetic and also unwise to adhere to it once it has been made in a particular case.

I am concerned, at the moment, only to show that in the quoted passage there are no new arguments against the desirability of making, and adhering to, a sharp analytic synthetic distinction. Quine's comments add nothing to the argument, which we gave in Section 2 against the utility of making a distinction between the analytic and synthetic. However, his comments, viewed as descriptive statements about people's actual practice, can help us in the main task of this section; i.e. to see whether the notion of analyticity by fiat can help defend the notion of analyticity against the objections brought up earlier in this work.

Consider first the problem of whether there are any analytically true sentences. Let us suppose, at least for the sake of argument, that if at one time an expression such as a predicate 'F' has been introduced as an abbreviation for another, say 'G', and declared to be synonymous with it, then the universal closure of the biconditional of these two predicates is analytically true by fiat and guaranteed to be true. But even within these assumptions the application of this line of reasoning to the question of, say, whether the sentence 'All bachelors are unmarried adult males' is analytic would involve us in the unrewarding historical conjecture that at some time in the past someone explicitly declared 'bachelor' to be synonymous with 'unmarried adult male'.

Consider next the problem about justification discussed in Section 2 of Chapter 1. Here it is pretty clear that the notion of analyticity by fiat will be of no help, since any

historical conjecture to the effect that some apparently analytic sentence S was at one time declared to be true by fiat will not be more certain than the claim that S is true. And thus the historical claim cannot be a good justification for either the claim that S is true or for the claim that S is analytically true.

Consider next the question, discussed in Section 3 of Chapter 1, of whether the notion of analyticity has any explanatory power. One might attempt to explain our belief in the truth of a sentence in terms of the notion of analyticity by fiat by constructing an explanation whose explanans contains, as the only lawlike premise, the statement that if a predicate F has at one time been declared to be synonymous with another predicate G then provided that the meanings of F and G do not change, we believe the universal closure of the biconditional connecting F and G . But a "no synthetic law" objection can be made against this explanation as well since the only lawlike statement in this explanans is analytic.

Thus, it seems that the notion of analyticity by fiat will not help in answering the objections brought up in this work to the notion of analyticity as it applies to the sentences of our present language.

A weakness in the notion of analyticity or truth by fiat shows up clearly even in the case of artificial languages. The inability of fiat to institute or guarantee truth is clearly seen in a case where we have a set of sentences whose non-logical terms have not yet been interpreted and each

sentence of which is declared true by fiat. In such a case there is, because of Church's theorem, no guarantee that we won't be able to later on derive a contradiction from this set of sentences. And if we were to derive such a contradiction then not all of the sentences in the set would be true, in spite of the fact that all of them were originally declared true by fiat. Thus, truth by fiat doesn't guarantee truth.

Section 7: The Verifiability Theory of Synonymy

The purpose of this section is to examine a definition of sentential synonymy put forward by Grice and Strawson in response to one of Quine's criticisms, and to examine Quine's response to this definition.

In "Two Dogmas" Quine had said that "If the verification theory (of meaning) can be accepted as an adequate account of statement synonymy, the notion of analyticity is saved after all."²¹ Now there is more than one way of defining the notion of analyticity via the verification theory of meaning. Whichever way we take however, it must be kept in mind, in order to avoid needless confusion, that definitions of analyticity must always be considered as containing a relativization to time and speaker since a sentence can be analytic at one time but not at another, and analytic for one person but not for another. Sometimes this relativization is implicitly taken care of when analyticity is defined with reference to an ideal language, the implicit assumption being that such

a language does not change over time in any respect since if it did it would not be the same language after the change as before. But when we are not defining analyticity with respect to an ideal language the relativization to time and speaker must be more firmly kept in mind. However, in the definitions to be considered I will, for stylistic reasons, usually not explicitly include such relativization, although the reader should keep them in mind.

One way to define the notion of analyticity is to say that a sentence is analytically true just in case any experience would confirm it to some degree or other and that no experience would disconfirm it to any degree. In order to make clear the intent of this definition it should be pointed out that from it we cannot conclude that if at some future time an experience occurred which we then took to be disconfirming evidence for a sentence we could then conclude that the sentence never was analytic. For the intent of the definition is that a sentence is analytically true at time t just in case any experience, if it occurred at time t , would confirm at time t the sentence (and similarly with disconfirmation). The definition of analyticity is of counterfactual form (in this it seems no worse than Quine's definition of stimulus meaning) and it makes no claim to the effect that if a sentence is analytic at one time then it must be analytic at other times.

Another way to define analyticity via the verification theory of meaning is to say, first of all, that two sentences are synonymous just in case any experience which would confirm or disconfirm one of them would confirm or disconfirm the other to the same extent. We can then define an analytically true sentence as one which is synonymous with some logical truth.

These two definitions do not have the same virtues and defects. The second definition, but not the first, has the defect of not defining analyticity as it applies to purely logical truths and of presupposing the notion of logical truth. However, it does have a virtue which the first definition doesn't. The first definition implicitly utilizes the notion of analyticity. Consider the first definition as it applies to, for example, the sentence 'Nothing is both round and square'. Certainly if we were to experience something which is both round and square this experience would disconfirm the sentence in question. You can, if you want to, say that it is logically impossible to have such an experience (i.e. that the sentence describing this experience is analytically false). But then this shows that you are implicitly utilizing the notion which you are supposed to be defining and that the first definition actually needs to be amended to say that a sentence is analytically true just in case every logically possible experience would confirm it and no logically possible experience would disconfirm it.

Now the second definition doesn't suffer from this defect. We can just say 'any experience' simpliciter, without

restricting the experiences referred to in the second definition to those that are "logically possible". If any given experience, including even "logically impossible ones" confirms or disconfirms S_1 to a certain extent, and also confirms or disconfirms S_2 to the same extent, then S_1 and S_2 are synonymous.

Both of these definitions however, are claimed by Quine to suffer from the fact that they presuppose the claim that a sentence, taken in isolation from its fellows, can admit of confirmation or disconfirmation at all. He then claims that this assumption is false. His countersuggestion is that "our statements about the external world face the tribunal of experience not individually but only as a corporate body"²² and that it is an illusion to suppose that "to each statement, or each synthetic statement, there is associated a unique range of possible sensory events such that the occurrence of any of them would add to the likelihood of truth of the statement, and that there is associated also another unique range of possible sensory events whose occurrence would detract from that likelihood".²³

Quine's countersuggestion seems quite plausible, especially with respect to the highly theoretical sentences of science. For example, an experience describable as being evidence for the truth of Newtonian mechanics doesn't seem to confirm Newton's second law any more than, say, Newton's first law. Moreover, Quine's view can even be made to look plausible with regard to relatively non-theoretical sentences. This

can be seen in terms of an example. Consider the claim that there is a pencil on my desk at time t . Suppose that, at time t , I look carefully on my desk and see no pencil. Quine's view is not merely that I can continue to accept the claim that there is a pencil on my desk by making changes elsewhere in my system of beliefs (e.g. by pleading hallucination, or by claiming that an invisible Martian put an invisible anti-pencil filter in front of me at time t , or...) but that we need not consider this recalcitrant experience as evidence against only the claim that there is a pencil on my desk. We can also consider it as evidence equally against the claim that I am not having a hallucination, and that there is no invisible Martian..., and We can "smear out" and distribute this disconfirming evidence against these sentences in any way we please, subject only to pragmatic considerations of simplicity, conservatism, etc. The same point is perhaps more readily seen not in terms of a recalcitrant experience but in terms of a confirming one. If I do see a pencil on my desk at time t , this need not be considered as evidence in favor of only the claim that there is a pencil on my desk but also equally in favor of the claim that my senses were in working order, and that no invisible Martian put an anti-pencil filter in front of me, and....

Now both of the definitions we have mentioned seem to presuppose that a sentence, taken in isolation from its fellows can admit of confirmation and disconfirmation. Grice and Strawson, in an attempt to save the verification theory

of sentence synonymy, respond to this view of Quine's in the following way. (What they refer to as 'the second doctrine' is the view of Quine's just described, i.e. the doctrine that it is an illusion to suppose that an individual statement, taken in isolation from its fellows, can admit of confirmation or disconfirmation at all.)

It is easy to see that acceptance of the second doctrine would not compel one to abandon, but only to revise, the suggested explanation of synonymy. Quine does not deny that individual statements are regarded as confirmed or disconfirmed, are in fact rejected or accepted, in the light of experience. He denies only that these relations between single statements and experience hold independently of our attitudes to other statements. He means that experience can confirm or disconfirm an individual statement, only given certain assumptions about the truth or falsity of other statements. When we are faced with a "recalcitrant experience", he says, we always have a choice of what statements to amend. What we have to renounce is determined by what we are anxious to keep. This view, however, requires only a slight modification of the definition of statement synonymy in terms of confirmation and disconfirmation. All we have to say now is that two statements are synonymous if and only if any experiences which, on certain assumptions about the truth-values of other statements, confirm or disconfirm one of the pair, also, on the same assumptions, confirm or disconfirm the other to the same degree. More generally, Quine wishes to substitute for what he conceives to be an oversimple picture of the confirmation-relations between particular statements and particular experiences, the idea of a looser relation which he calls "germaneness" (p. 43). But however loosely "germaneness" is to be understood, it would apparently continue to make sense to speak of two statements as standing in the same germaneness-relation to the same particular experiences. So Quine's views are not only consistent with, but even suggest, an amended account of statement synonymy along these lines.²⁴

Since "Two Dogmas" Quine's Word and Object was published, a book in which the rough notion of two statements standing in the same germaneness relation to each of all possible

experiences is explained as being, on an optimum modulus, the relation of sentential stimulus synonymy. In the same book he also responds to the above attempt to save the verification theory of synonymy. As we shall see, Quine misinterprets Grice and Strawson's proposal. But first let us look at Quine's response and at some preliminary problems with it.

Grice and Strawson...(define) S_1 and S_2 as synonymous when, for every assumption as to the truth values of other sentences, the same experiences confirm (and disconfirm) S_1 on that assumption as confirm (and disconfirm) S_2 on that assumption. Now instead of 'every assumption as to the truth values of other sentences' we can as well say simply 'every sentence S ': for S can be the logical conjunction of those "other sentences" in question or their negations. So S_1 and S_2 are defined to be synonymous when, for every S , the same experiences confirm (and disconfirm) S_1 on the hypothesis S as confirm (and disconfirm) S_2 on S . The notion of confirmatory and disconfirmatory experiences had a behavioral approximation in our notion of stimulus meaning; but can we relativize it thus to a hypothesis S ? I think we can; for confirmation or disconfirmation of S_1 on S is presumably confirmation or disconfirmation of the conditional sentence consisting of S as antecedent and S_1 as consequent. Then the proposed definition of synonymy becomes: S_1 and S_2 are synonymous if for every S the conditional compound of S and S_1 and that of S and S_2 are stimulus-synonymous. But now it is apparent that the definition fails to provide a tighter relation between S_1 and S_2 than stimulus synonymy. For, if S_1 and S_2 are stimulus-synonymous then a fortiori the conditionals are too.²⁵

Now Quine thinks that stimulus synonymy is not (even if we limit our considerations to intrasubjective synonymy) an adequate reconstruction of synonymy in the traditional sense. (In the next section I will try to show that, in the intrasubjective case, it is more adequate than Quine claims. But for now we have other things to consider.)

Quine seems to be presupposing something like the false principle that the probability of q given p is the same as the probability of 'if p then q '. He seems to make this mistake when he says "for confirmation or disconfirmation of S_1 on S is presumably confirmation or disconfirmation of the conditional sentence consisting of S as antecedent and S_1 as consequent". However, this mistake of conflating conditional probability with the probability of the conditional is not part of Quine's misinterpretation of Grice and Strawson. The reason it is not is that it "cancels out", so to speak, in Quine's calculations. To illustrate what I mean by Quine's mistake cancelling out consider the following two principles (the second of which is false).

- a. If S_1 and S_2 have the same probability then so do 'if S then S_1 ' and 'if S then S_2 '.
- b. If 'if S then S_1 ' and 'if S then S_2 ' have the same probability then so do S_1 and S_2 .

Now when Quine finally gets down to his version of Grice and Strawson's proposal he doesn't seem to depend on the mistaken conflation of conditional probability with probability of the conditional, although he does seem to depend on something like a stimulus synonymy "analogue" of the two principles (a) and (b). So this particular mistake of Quine's does not, by itself, make his reply to Grice and Strawson inappropriate.

Let us now consider the way in which Quine's reply misinterprets or is inappropriate to Grice and Strawson's proposal. First of all, Quine pretty clearly seems to misinterpret Grice and Strawson (hereafter G and S) when they

say "on certain assumptions about the truth values of other statements", and he says "on every assumption about the truth values of other statements". However, in spite of this misinterpretation, and in spite of the fact that G and S don't amplify what they had in mind when they used the expressions 'certain assumptions' and 'other statements' Quine's reply is inappropriate for an even more fundamental reason. In order to see what this more fundamental reason is, let me try to get Quine and G and S as close together as possible, so to speak.

G and S:

S_1 means the same as S_2 for person P at time t just in case if certain other sentences (whose conjunction we will call S) are true, then S_1 and S_2 are stimulus synonymous for person P at time t.

Quine:

S_1 means the same as S_2 for person P at time t if and only if the conditional compound of S and S_1 and that of S and S_2 are stimulus synonymous for person P at time t.

(Here 'S' refers to the same conjunction of sentences that it did in the G and S definition.)

Now Quine claims (correctly, as far as I can see) that if S_1 and S_2 are stimulus synonymous then so are 'if S then S_1 ' and 'if S then S_2 '. I take it that Quine also holds to the converse of this (see bottom two lines on p. 64 of Word and Object, where his 'if' is apparently meant as 'if and only if'). So Quine's definition reduces to the claim that two sentences are intrasubjectively synonymous just in case

they are intrasubjectively stimulus synonymous.

But now it is clear that Quine's definition is not equivalent to G and S's definition, since the respective definientia are not equivalent. That is, the claim that S_1 is stimulus synonymous with S_2 is not equivalent to the claim that if S is true then S_1 and S_2 are stimulus synonymous.

Grice and Strawson's definition of sentential synonymy has the virtue of not implicitly presupposing the very notion which is being defined. Perhaps this is why Quine claims that if the verification theory of meaning is adequate as an account of sentential synonymy then the notion of analyticity is saved after all. Grice and Strawson's definition certainly seems worthy of development and filling in of details. Nevertheless, at present I cannot see how such a further development along these lines would help in answering the objections to the notion of analyticity mentioned in earlier sections of this work, especially the objections that the notion of analyticity has neither explanatory nor justificatory power.

Section 8: Stimulus Synonymy as an Explication of Synonymy

The purpose of this section is to see how far the notion of stimulus synonymy, as this notion is developed by Quine in Word and Object, can be used to reconstruct the notion of synonymy in the traditional sense. I will argue that even though it won't do the job completely it goes farther than Quine claims.

For our purposes we need to make distinctions among various subspecies of synonymy. In this section I will consider only intrasubjective synonymy of expressions. Intersubjective intralinguistic and intersubjective interlinguistic synonymy will not be discussed. What we are concerned with in this section then is the notion of two expressions being synonymous for a person *P* at time *t*. Moreover, the expressions whose synonymy we will first consider are sentences.

When the sentences in question are occasion sentences Quine admits that stimulus synonymy, especially as socialized, pretty well reconstructs traditional synonymy.²⁶ It is even adequate enough "when the sentences are standing sentences which, like 'The Times has come', closely resemble occasion sentences in the variability of assent and dissent".²⁷ The trouble comes, he claims, when we consider standing sentences with sparse stimulus meanings. I will argue that stimulus synonymy adequately reconstructs traditional synonymy even in the case of standing sentences with sparse stimulus meanings. But before I do I think it worthwhile to point out a possible misunderstanding of Quine which might arise.

It might appear to some that Quine is wrong when he says that for intrasubjective synonymy of occasion sentences, their intrasubjective stimulus synonymy, especially as socialized, is adequate as an account. It might appear that Quine's own examples 'It is a rabbit' and 'It is a rabbit part' are counterexamples. Here we have two occasion

sentences which are stimulus synonymous but apparently not synonymous. But Quine's rabbit-part example is meant to show that the terms 'rabbit' and 'rabbit part' (and also, of course, 'rabbit stage' etc.) are not synonymous. This is pointed out by Quine on the bottom half of page 51 and page 52 of Word and Object. It is also pointed out by him in his article "On the Reasons for Indeterminacy of Translation".²⁸ In this article he says, among other things relevant to this point, that "The gavagai example was at best an example only of the inscrutability of terms, not of the indeterminacy of translation of sentences."

To make his thesis of the indeterminacy of meaning easier to see Quine uses the example of a radically foreign language and expression (such as 'Gavagai'). But if the thesis of the indeterminacy of meaning is to be taken seriously then it seems to me that its lessons apply equally well at home, i.e. to a speaker's own language. So let me try to apply these lessons to a speaker's own language. I have to do this because I am concerned only with the case of intrasubjective intralinguistic sentence synonymy when I claim that this kind of synonymy is more adequately captured than Quine thinks by the notion of intrasubjective intralinguistic stimulus synonymy of sentences.

In Word and Object Quine says this about the case of intrasubjective intralinguistic synonymy, both of terms and of sentences.

Yet surely the main interest of the synonymy of 'Bachelor' and 'Unmarried man' as occasion sentences was the line it seemed to give on the synonymy of 'bachelor' and 'unmarried man' as terms. Now within English the situation is not beyond saving. To get synonymy of terms from synonymy of the corresponding occasion sentences we need only add a condition that will screen out such pairs as 'bachelor' and 'part of a bachelor'; and this we can do by requiring that the subject be prepared to assent to the standing sentence 'All Fs are Gs and vice versa', thinking of 'F' and 'G' as the terms in question. The definition becomes this: 'F' and 'G' are stimulus synonymous as terms for a speaker at *t* if and only if as occasion sentences they have the same stimulus meaning for him at *t* and he would assent to 'All Fs are Gs and vice versa' if asked at *t*.²⁹

Now if we apply this definition we see, for example, that 'rabbit' and 'rabbit part' are not stimulus synonymous terms for me, for example, because when asked, I would not assent to 'All rabbits are rabbit parts, and vice versa'. They are also not synonymous as terms for me. But these expressions are stimulus synonymous for me as sentences. More precisely, the sentences 'This is a rabbit' and 'This is a rabbit part' are stimulus synonymous for me. But now we come to the crucial question, which is this: Are these sentences synonymous for me? If they aren't then indeed Quine is wrong in his claim that sentential synonymy of occasion sentences (for the intrasubjective intralinguistic case) is adequately reconstructed by sentential stimulus synonymy.

Now this crucial question is difficult to answer because we are so at home with the syntax of our own language. Moreover, we automatically assume that the 'This' which occurs in the first of these two sentences is coextensive with the 'This' which occurs in the second of these two sentences.

(Notice that if the 'This' which occurs in 'This is a rabbit' refers to the rabbit in front of me, and the 'This' which occurs in 'This is a rabbit part' refers to the rabbit part in front of me, then the two sentences (or perhaps, more appropriately, sentence tokens) might be more easily said to be synonymous.)

Now my strategy is to answer the crucial question of whether these two sentences are synonymous for me in the affirmative. I do this because my intuitions about whether these two sentences are synonymous fail me here. That is, my intuitions don't clearly give a negative answer to this crucial question. This move is analogous to the move where we let an explication decide a question for us in those cases where our intuitions have no answer one way or the other. Thus we can conclude that the rabbit-part example is not a counterexample to Quine's claim that intrasubjective synonymy of occasion sentences is pretty adequately reconstructed by the notion of their stimulus synonymy.

Let me now return to my main concern, which is to argue that Quine is wrong when he says that stimulus synonymy falls short when it comes to those standing sentences with sparse stimulus meanings. Of these kinds of sentences he says:

"But the less variable the standing sentences are in point of assent and dissent, the sparser their stimulus meanings will be and hence the more poorly stimulus synonymy will approximate to synonymy of the envisaged sort."³⁰

The situation is best illustrated in terms of a pair of highly theoretical sentences of some science. To say that the stimulus meaning of a sentence is sparse means that most of the stimulations we might come across are causally irrelevant to our assent to or dissent from the sentence. If, for example, upon being queried I assent to or dissent from Newton's second law while looking at my desk, the sight of my desk is causally irrelevant to my assent or dissent. The sight of my desk does not prompt my assent or dissent. Thus the sight of my desk belongs to neither the affirmative nor the negative stimulus meaning of Newton's second law for me at that time.

However, the sparseness of stimulus meanings for highly theoretical sentences is not a sufficient ground for the claim that stimulus synonymy of such sentences is a poor reconstruction of their synonymy in the traditional sense. For even if S_1 and S_2 were to each have, only one member in each of their affirmative and negative stimulus meanings, S_1 would not be stimulus synonymous with S_2 if their respective stimulus meanings were not identical. A "near miss" is as good as a mile. Stimulus synonymy may come in degrees, but synonymy in the traditional sense does not.

Thus, as long as there is at least one possible experience which would, at time t , confirm or disconfirm S_1 , but not confirm or disconfirm S_2 , then S_1 and S_2 are not completely stimulus synonymous.

Thus Quine's talk of sparseness of stimulus meanings, and his talk about ways of "tightening" the relation of stimulus synonymy, is irrelevant to the question of whether stimulus synonymy is an adequate reconstruction of traditional synonymy.³¹ All that this talk shows is that for sentences with sparse stimulus meanings it is much more difficult to gain evidence for the claim that two of them are not stimulus synonymous than it would be if they were occasion sentences.

What would be relevant to the question of whether stimulus synonymy adequately reconstructs traditional synonymy for sentences of this kind is an example of two sentences which are completely stimulus synonymous but not synonymous in the traditional sense. But since Quine's definition of stimulus synonymy requires us to consider all possible stimulations it seems very unlikely that we would be able to find such a pair of sentences. Indeed, what we would be more likely to find, in such a search, is a pair, or more, of sentences which are "pretty nearly" stimulus synonymous, and about whose synonymy in the traditional sense we are puzzled.

This last kind of situation is well illustrated in cases where mounting recalcitrant experiences result in the simultaneous overthrow of a whole set of theoretical sentences. For example, mounting recalcitrant experiences resulted in the overthrow of a whole batch of sentences of Newtonian physics which were strongly connected to each other. And it is just these kinds of sentences which, to a thoughtful observer, always seemed suspiciously related to each other

by devious ties of synonymy. Think, for example, of the set consisting of Newton's three laws of motion. It is just such kinds of sentences which tend to support Quine's contention that sentences are not confirmed or disconfirmed in isolation from their fellows. But it is also just such cases in which we are inclined to suspect that the relations among overthrown sentences are relations of near synonymy in the traditional sense, in spite of superficial appearances to the contrary. And this fact supports the claim that stimulus synonymy is an adequate reconstruction of traditional synonymy even for this kind of sentence.

There is a further difficulty involved in trying to get stimulus synonymy to reconstruct the traditional notion of synonymy, a difficulty which Quine attempts to solve with his notion of socialized stimulus synonymy. Socializing intrasubjective stimulus synonymy is supposed to make stimulus synonymy a more adequate reconstruction of intrasubjective synonymy by cutting out the effects of information which is idiosyncratic to the individual. Thus, the sentences 'Indian nickel' and 'Buffalo nickel', while stimulus synonymous for the numismatic expert, are, Quine assumes, not synonymous for the expert. But then we repair the situation by pointing out that these two sentences are not socially stimulus synonymous since they are not stimulus synonymous for the novice. So then we say that two sentences mean the same for person P just in case they are stimulus synonymous for P and also stimulus synonymous for every member of P's

"community". The desired result is that the two sentences in question are not synonymous for the expert because while they are stimulus synonymous for him they are not socially stimulus synonymous.

I have always been unimpressed by this move of Quine's because it seems to me that his implicit and indirect use of the traditional notion of meaning is hidden in his use of the notion of "community". I take it that by 'community' he means 'linguistic community'. To stick to the example, Quine seems to presuppose that 'Indian nickel' means the same (in the traditional sense of 'means the same') for one member of the community as it does for any other member of the community. Without this presupposition the socialization of stimulus synonymy loses its point. On the other hand I don't see how Quine can justify this uncritical reliance on the supposedly disreputable notion of intersubjective synonymy. (Incidentally, it might be said that if 'Indian nickel' doesn't mean the same for me as it does for you then we are not speaking the same language. But see Quine's own misgivings about the notion of 'a language' on page 214 of Word and Object.) Thus, if we are to avoid implicitly utilizing in our definitions the notions against which Quine has so often inveighed then we must do without the notion of socializing stimulus synonymy.

Now since I want to claim that intrasubjective stimulus synonymy is, all by itself, (i.e. without socializing it) an adequate reconstruction of intrasubjective synonymy of occasion sentences how do I handle the case of the numismatic

expert? I handle it by not agreeing with Quine's implied claim that 'Indian nickel' and 'Buffalo nickel' are not, for the expert, synonymous in the traditional sense. I don't claim that they are synonymous for him either. I agree that for the non-expert they are not synonymous. But it is not clear whether or not they are synonymous for the expert. It doesn't seem to me that for the expert 'Here is a coin with an Indian head on one side' is a better analysis of 'Indian nickel' than is 'Here is a coin with an Indian head on one side and a buffalo on the other'. Furthermore, we cannot settle this question by appealing to the numismatic experts because they, not being philosophers, are like dictionaries in not making fine enough distinctions between coextensiveness and synonymy, or between synthetic truths and analytic ones.

The upshot is that since our intuitions don't come down clearly on the side of the claim that 'Indian nickel' and 'Buffalo nickel' are not synonymous for the expert we can let the definition decide the case for us. And the definition says that, as sentences, they are synonymous because they are stimulus synonymous.

It might be worthwhile to mention, in passing, that from this conclusion it doesn't follow that stimulus meaning is, even for the sentences so far considered, an adequate reconstruction of meaning in the traditional sense. To think that it is adequate is to embrace a dogma of reductionism, i.e. the dogma that the meaning of a sentence is nothing but the set of all those experiences which would

confirm it (or perhaps the ordered set, the first member of which is the set of all those experiences which would confirm it and the second member of which is the set of all those experiences which would disconfirm it). Two sentences of the sort so far considered have the same meaning if and only if they have the same stimulus meaning; but it doesn't follow from this that the meaning of a sentence is nothing but its stimulus meaning. Berkeley made the mistake of embracing the above mentioned dogma by claiming, for example, that the meaning of the sentence 'This table exists' is, in effect, nothing but the set of sentences describing experiences which would verify it (sentences such as 'I see the table', 'I feel the table', etc.). His mistake seemed plausible because we seem hard pressed to come up with an answer to his implicit question 'If 'exists', as applied to physical objects, doesn't mean to be perceived or to be perceivable then what else does it mean?'. (My answer is that 'exists' is cognitively primitive in the sense that if you really don't know what 'exists' means then I can't tell you.)

There remains a further problem for me if I want to claim that intrasubjective stimulus synonymy is an adequate reconstruction of intrasubjective synonymy. The problem is illustrated by the example of the sentences 'There are black dogs' and 'There are black cats'. The affirmative stimulus meanings of these sentences are presumably empty. And their negative stimulus meanings, if any, are not capturable in stimulations occurring within an optimum modulus. Thus these

two sentences are presumably stimulus synonymous, yet seem to be non-synonymous. It is clear that the terms 'black dog' and 'black cat' are not synonymous. The above sentences can be said to be non-synonymous only if we assume that the two occurrences of 'There are' are synonymous (for if they weren't then the two sentences might be synonymous even though the terms 'black dog' and 'black cat' are not). Since it is also clear that these two occurrences are synonymous we have to conclude that the two sentences are non-synonymous.

(Note, incidentally, a difference between this example and the earlier one about rabbits and rabbit parts. No one would want to claim that words like 'it' and 'this thing' refer to the same thing in all their occurrences (and thus, since sameness of sense implies sameness of references, they don't have the same sense, if they have a sense at all, in all their occurrences). But even those who, like Ryle, would want to claim that 'there are' (or 'exist') is ambiguous surely would agree that at least 'there are' means the same as applied to cats as it does when applied to dogs.)

Thus we have to conclude that stimulus synonymy doesn't adequately reconstruct traditional synonymy for sentences of the above kind. I simply see no way out of this difficulty.

Section 9: Meaning, Significance, and Brain States

The purpose of this section is to examine some ways in which it might be thought that the notion of meaning might, in the future, be made more "legitimate" by being linked up

with some internal mechanisms supposedly responsible for the process which we call understanding an expression.

In its present state the notion of meaning might be compared with the notion of a dormitive virtue, as used by Moliere's physician. The claim that opium puts people to sleep because it has a dormitive virtue was non-explanatory because the only criterion for whether or not something had a dormitive virtue was that it put people to sleep. The same kind of defect is involved if we say that a person understands an expression, or knows how to use it (in the sense of applying it in a non-arbitrary way), because there is a meaning which the expression has and which the person "grasps". For the only criterion for whether or not a person grasps the meaning of an expression is that he understands it, or knows how to use it.

Now the notion of a dormitive virtue can be seen as a promissory note which was eventually cashed in. To say that opium put people to sleep because it had a dormitive virtue can be viewed as a statement to the effect that there is an unknown something in opium which is responsible for the fact that opium puts people to sleep. This unknown was eventually discovered by chemistry, and thus the promissory note was cashed in. Similarly it might be claimed that someday the notion of meaning will become "legitimate" by being cashed in in terms of neurophysiological states.

Let me paint a picture, so to speak, suggested by this kind of move, and then see what scientific sense might be made of it.

According to this picture to each expression which we understand there corresponds an as yet unknown brain state. In order to screen out irrelevant issues let us also assume, for the sake of argument, that the notion of synonymy is clear at each pair of expressions which we understand; i.e. that for each such pair we either know that they are synonymous (as with 'bachelor' and 'unmarried man'), or know that they are not synonymous, or know what to do to gain evidence for the claim that they are synonymous. According to the picture, the claim that two expressions are synonymous is tantamount to the claim that when the brain state correlates of expressions are eventually found it will be seen that for any given person P the brain states correlated with two expressions which are, for P, intuitively intrasubjectively synonymous (such as 'bachelor' and 'unmarried man') are identical. Moreover, on this view, the analogue of the fact that opium puts people to sleep is the fact that there are expressions which we understand, in the sense that we apply them in a non-arbitrary way to new objects which we have not been told to apply the expression in question. Thus it is the fact of what might be called our linguistic competence with respect to these expressions which is the fact to be eventually explained by appeal to the brain states correlated with these expressions. When these brain states are discovered, so the

story goes, a genuine explanation of our linguistic competence will be available since the explanation will have the form 'A person understands expression E if and only if he is in brain state B'. The explanation will be genuine because the criterion for whether a person is in brain state B will be independent of the criterion for whether he understands expression E. Another way to put this is to say that the connection between the fact that a person is in brain state B and the fact that he understands E is a contingent or factual connection rather than a necessary one. Things might have been different in the sense that brain state B might just as well have been correlated not with E but with some other expression E'. Let us now see how much scientific sense can be made of the picture I have just constructed.

For the sake of simplicity let us limit our considerations to those expressions which are monadic predicates. Since a brain can simultaneously be in many different states the question arises of how we are to discover which of these states is the one correlated with some expression E. One might try to answer this question by saying that we could, in principle, use a before-and-after procedure in which we would take a child learning his native language and compare his brain states before and after he has learned the use of E. What is wrong with this method is not merely the fact that, in practice, there will probably be many "new" brain states from which to pick. There is the more serious

objection that it is highly doubtful whether it is even possible in principle for someone to learn the use of any but a few of the expression of his first language in the stringent one-by-one fashion which the before-and-after method requires.

We might try another approach to the problem of discovering what the brain state correlate of an expression is. We might consider the class of all those people who understand some expression E and then look for a brain state B common to all and only those people. We then might be tempted to conclude that this brain state B is the one correlated with E. But this would be a mistake. It would be a mistake because from the fact that all of these people understand E, in the sense of applying it in a non-arbitrary way to new cases, it doesn't follow that they are all using E in the same sense or with the same "meaning". In order to be able to conclude that B is "the" brain state contingently correlated with E we would need a criterion for the intersubjective synonymy of E which is independent of the criterion for whether they are all in the brain state B. But this is just what we don't have. We may, by noticing the objects to which these people are willing to apply or withhold E, gather inductive evidence for the claim that E is, or is not, intersubjectively coextensive. But what we are looking for is something else; i.e. a way of getting evidence for the claim that E is intersubjectively synonymous. However, I see no way of getting such evidence which does not arbitrarily

and implicitly assume the intersubjective intralinguistic synonymy of expressions other than E in a manner similar to the way Carnap assumed the intersubjective interlinguistic synonymy of various expressions, as mentioned in the circularity criticism of Carnap which we brought out in Section 3 of this chapter. Consequently, I feel obliged to conclude that it is difficult to see how the brain state picture can be empirically supported in such a way as to support the view that for each meaningful expression there is a meaning which it has.³²

Chapter 3

Analyticity in Artificial Languages

It is an understatement to say that Carnap considered artificial languages to be of help in the clarification of concepts, including the concept of analyticity. Quine, on the other hand, has not considered the use of an artificial language to be of any help in the clarification of analyticity.¹ The purpose of this chapter is to examine some issues connected with the attempt to clarify analyticity with the help of artificial languages, to show in what sense the notion of analyticity is thus clarified, and to provide conditions under which a predicate, defined with reference to an artificial language, can be said to be an analyticity predicate.

At the outset it should be mentioned that, strictly speaking, the objects which are obscure or clear, and whose clarification we seek, are not concepts but linguistic expressions. (Although I have, in this work up till now, used the word 'concept' the reader may have noticed that its use was never essential because it could have been replaced by 'linguistic expression'.)

The Encyclopedia of Philosophy, in conformity with philosophical usage, defines a formal language as an interpreted formal system.² The ambiguity of 'interpreted formal system' raises many interesting questions about what the relationship should be between an interpreted formal system

and a natural language in order for the formal system to properly merit the title 'language'. For example, a particular interpretation can be given in more than one way. It can be given directly by specifying the extensions of the various expressions which are being interpreted. Or it can be given indirectly by specifying the intensions of these expressions. Suppose that we had an object language predicate 'F'. One way to interpret it would be to lay down the following rule in the metalanguage: 'F' is coextensive with 'salesmen' (or: 'F' denotes the class of salesmen). Another way would be to lay down in the metalanguage the following rule: 'F' is synonymous with (i.e. has the same intension as) 'salesmen', (or perhaps 'F' designates the property of being a salesman). There may be some who might want to argue that only the second way of giving the interpretation would make the formal system a language because only this way is the meaning (as opposed to merely the extension) of the predicate 'F' given.

A question also arises as to whether an interpreted formal system should contain axioms in order to qualify as a language.

Still others might want to claim that an interpreted formal system is not a language if it is not actually used for the purposes of communication.

I will ignore these and other interesting questions about the notion of language since I can do so without detriment to the goals of this chapter.

Those who like clarity, exactness, and precision like formal languages because some questions and answers concerning them are, to some extent, more clear, exact, and precise than they are for natural languages. E. W. Beth says, for example, (to use an illustration chosen at random):

It is one of the main advantages of formalised languages as compared to natural languages that their syntax and semantics can be constructed as deductive sciences. Thus numerous questions which cannot be settled satisfactorily with regard to natural language can be answered in a completely rigorous manner for formalised languages. For this reason it is most regrettable that British analytic philosophy has recently turned away from using and investigating formalised languages and now develops what I have described in section VI as a "mystical" attitude with regard to natural language.³

An example of the clarity made possible via formalised languages is provided by the fact that we can define 'sentence of L' in such a way that there is what may be called a decision procedure for this predicate; i.e. we can mechanically determine, in a finite number of steps, whether or not a given object is a sentence of L. Thus, the predicate 'sentence of L' is clear in the sense that we have a search procedure for it (see Section 4 of Chapter 1 for the notion of a search procedure). (If we have a decision procedure then we automatically have a search procedure (although the converse doesn't hold) since a decision procedure is a search procedure which is guaranteed to be successful.) By contrast, it seems that we have neither a decision procedure nor a search procedure for the predicate 'sentence of English'.

Not all syntactical or semantical predicates of a formalised language have decision procedures. For example, the syntactical predicate 'provable in L' has no decision procedure for formalised languages rich enough to include truth functions and quantification. Likewise the semantical predicate 'logically true' has no decision procedure for such languages. But since we have search procedures for these predicates they can be said to be clear, whereas the corresponding predicates for a natural language are not clear because they have no search procedures. We have, for example, a search procedure for the predicate 'logically true in L' (where L is some appropriate formalised language). One of these procedures would consist in having a person construct a truth tree for the negation of some given sentence whose logical truth we want to test for.

Similarly 'analytic in L' can be made clear for a formalised language. But the question arises of how this clarifies the predicate 'analytic in English'. It doesn't seem to provide any clarification at all. A definition of 'analytic in L', for some formalised L, can be as exact, precise, and clear as one could want and yet we are still left with the same English sentences whose analyticity we are undecided about and about which we don't know what to do to gain evidence for or against their analyticity as we had before the definition of 'analytic in L'. The cause of this situation is quite simple. It consists in the fact that typically all, or at least most, of the sentences of

a formalised language are not identical with any English sentence. Because of this the extensions of 'analytic in L' and 'analytic in English' hardly overlap, if at all. Consequently, if we take, for example, the English sentence 'Everything green is extended' we won't be helped in deciding whether or not it is analytic by being told that according to the definition of 'analytic in L' some other sentence (i.e. a sentence of L) is or is not analytic in L.

The situation is not beyond saving. But in order to save it we will have to look closely at the question of what the relations must be between some formalised language and English in order for a definition of 'analytic in L' to throw light on the predicate 'analytic in English'.

I think one can easily be misled by concept talk into thinking that because we may define, in a clear and exact way, the predicate 'analytic in L', for some formalised L, the "global" concept of analyticity is thus clarified, even though the predicate 'analytic in English' is not thus clarified. But even those who would grant the legitimacy of concept talk would doubtless agree to the principle that a concept is clarified if and only if every linguistic expression which is known to express it is clarified. And if some procedure doesn't clarify the expression 'analytic in English' (an expression which presumably expresses the "global" concept of analyticity) then it can't be said to clarify the global concept of analyticity, in spite of the fact that it makes clear other predicates which express this

global concept; i.e. predicates such as 'analytic in L' (where L is some definite formalised language). These remarks are a way of explaining Quine's request for a definition of 'analytic in L', where 'L' is now not just a name of some language but a genuine variable ranging over languages. For if we were able to provide an exact and clear definition of the two place predicate 'x is analytic in L' then we would presumably be able to get an equally clear one place predicate from it by replacing the variable 'L' with the name 'English' (provided that 'English' was at least as clear as 'x is analytic in L') and thus get a clarification of 'x is analytic in English', which could then be of use in deciding, for example, whether 'All green things are extended' is analytic.

Quine's request for a definition of 'analytic in L', for variable 'L', has provoked a response by Bohnert which brings up an important issue relevant to our present concerns and which needs to be discussed. In discussing the binary predicate 'S is analytic for L' Bohnert says this:

As Quine pictures it, it would seem that this relational predicate would have, itself, to be a logically determinate concept since a logically determinate one place predicate is to be gotten from it by simple substitution of 'L₀' for 'L'. This would require complete specificity as to the structures of all languages in the range of 'L', obtainable, presumably, only by recursive methods, which would be hard to reconcile with Quine's desire for extreme generality. Presumably a better way of posing the metalogical problem would be to find a definition of 'x is an analyticity concept for L' in terms of adequacy conditions to be met by the definition of x in the metalanguage of L. Even here, however, the range of language would have to

be exactly delimited by fixing certain general features essential to being a language and the cry would go up again that the philosophically essential features lay in the non-formally expressed reasons for specifying these features in just the way they were.⁴

Quine is portrayed here as asking for the impossible. On the one hand Quine asks for a clarification of analyticity and on the other hand he is portrayed as refusing to accept a procedure which would make it perfectly clear. But this dilemma into which Quine is being placed is a false one. As far as I know Quine doesn't require that the predicate 'S is analytic for L' to be logically determinate. The most that can be attributed to Quine on the basis of his writings is a request that the predicate 'S is analytic in English', which would be gotten from the binary predicate by substituting 'English' for 'L', be clearer than it is at present. But the fulfillment of this request doesn't require that we use recursive methods in the definitions of the terms involved, or that we require complete specificity as to the structures of all languages in the range of 'L'. Quine seems comfortable enough (in the context of his complaint) with the notion of language, or at least with the notion of sentence of English. And presumably he would be happy if the notion of analyticity were to be made as clear as the notion of sentence of English, even though this last notion could be claimed to be not completely clear. Since 'S is a sentence of English' is not a logically determinate predicate there is no reason to suppose that Quine is requesting 'S is analytic in English' to be one either.

If we want to claim that a definition of 'analytic in L_0 ', for some formalised L_0 , throws light on the predicate 'analytic in English' then the main question we have to concern ourselves with is the question of what the relations should be between these two predicates in order for light to be so thrown. The way Quine pictures it, the only thing that these two predicates have in common is the joint use of the syllables 'analytic'.⁵ This doesn't seem to be enough.

We obviously can't require that the two predicates in question be coextensive (unless, of course, L_0 were English itself). And since synonymy guarantees coextensiveness we also can't require that these two predicates be synonymous. But we can require that the extensions of these two predicates be related in a way to be indicated below.

Bohnert has emphasized the autonomy of meaning of a semantical predicate within the framework of a formalised language.⁶ This autonomy means that we do not have to have a previous understanding of, or familiarity with, a semantical predicate defined for a formal language in order to say that we understand the predicate as applied to the formal language in question. One way to emphasize this autonomy would be to use, as the defined predicate, not a previously familiar expression (such as the 'analytic' in 'analytic in L_0 ') but a totally unfamiliar one. In order to emphasize the autonomy of a predicate such as 'analytic in L_0 ' Quine suggests that we should instead "rewrite" it as 'K' so as not to

misleadingly suggest that by clearly defining 'analytic in L_0 ' we have thrown any light on the predicate 'analytic in English'.⁷ So let us use a predicate such as 'K', or 'sentence of kind K', and see what can be said about the power of such a predicate, defined for a formal language, to clarify the predicate 'analytic in English'.

Suppose we have a formalised language L_0 and a definition of 'sentence of kind K' such that this predicate is clear at each sentence of L_0 . Suppose further that there is a known function (perhaps only a partial one) which takes sentences of English as arguments and sentences of L_0 as values such that a sentence of L_0 is the value of the function for a given sentence of English as argument if and only if the sentence of L_0 is what may be called "the best paraphrase" of the English sentence into L_0 . (The best paraphrase should not be thought of as preserving complete synonymy between some English sentence and its correlate in L_0 ; see below.)

To say that 'sentence of kind K' is clearer than 'analytic in English' is to say that if 'analytic in English' is clear at some English sentence S then 'sentence of kind K' is clear at the best paraphrase of S, and that there are English sentences at which 'analytic in English' is not clear but at whose paraphrases 'sentence of kind K' is clear.

Consider a division of all English sentences into two classes; those at which 'analytic in English' is clear, and those at which it is not. There may be those who might want to claim that the predicate 'analytic in English' is clear

at x' is itself unclear at some English sentences. This is equivalent to saying that there are borderline cases of the predicate 'analytic in English' is clear at x' or, metaphorically speaking, that clarity and obscurity themselves have fuzzy edges. We could even permit these fuzzy edges as long as 'analytic in English' is clear at x' is clearer than 'analytic in English'. And indeed it is clearer since there obviously are English sentences (such as 'Everything green is extended') at which the predicate 'analytic in English' is clearly unclear. However, let us assume for the sake of simplicity that 'analytic in English' is, at each sentence of English, either clear or not clear. That is, let us assume that clarity and obscurity don't have fuzzy edges. The set of English sentences at which 'analytic in English' is clear will contain the following kinds of sentences.

1. Those which are definitely believed to be analytically true.
2. Those which are definitely believed to be analytically false.
3. Those which are definitely believed to be synthetic.
4. Those which do not belong to categories 1 through 3 but which are such that we know what to do go to gain evidence for the claim that they are analytic or synthetic.

An example of the kind of sentence in subclass 1 might be the sentence 'All bachelors are unmarried'. An example of subclass 2 might be the sentence 'No bachelor is unmarried'.

Examples of subclass 3 are the sentences 'I have a green car' and 'I don't have a green car'. An example of subclass 4 might be the sentence 'All men are mortal'. (We have to consider sentences of kind 4 because the analyticity or syntheticity of a sentence is not always immediately obvious.) At the outset we may not know whether this sentence is analytic or synthetic for a person at a given time. But if, upon examination, it is discovered that the person is using the words 'man' and 'mortal' in such a way that he considers it logically impossible for an object to be both a man and mortal, or if he doesn't consider it to be logically impossible, then we will have discovered that the sentence is analytic or synthetic for him, as the case may be. If however, it is determined that the person just doesn't know whether or not he considers it logically impossible for something to be both a man and immortal, then we will classify the sentence as belonging to none of the four classes described above but rather to the class of sentences at which 'analytic in English' is unclear. (More precisely, (see Section 7 of Chapter 2) the predicate in question is 'analytic for English speaker P at time t' or, if we want to consider English as a set of closely related languages, 'analytic in that dialect of English which the speaker is using'. However, I will omit such explicit relativization for the sake of perspicuity.)

Let us assume that to each sentence we can apply either the kind of procedure which we imagined being applied to the sentence 'All men are mortal' or some other procedure which

will help us to determine whether the speaker believes a sentence to be analytic. (Another procedure which might be used to help a speaker realize that he believes some sentence to be analytic is to show that the sentence is a logical consequence of some sentences which he already believes to be analytic.) If, upon application of some appropriate procedure, a sentence would be believed by our speaker to be analytic (or synthetic) then this sentence will belong to the class of sentences at which 'analytic in English' is clear. But if, upon application of some appropriate procedure, our speaker says that he just doesn't know whether or not he believes that the sentence is analytic (or synthetic) then this sentence will belong to the class of sentences at which 'analytic in English' is unclear. (I emphasize 'is' because it is possible for a predicate to be clear at an object without the speaker believing that it is clear at that object (because he has never considered the question of whether the predicate applies to that object). It is also possible for a predicate to be unclear at an object without a person believing that it is unclear at that object. Because we, with our limitations, typically consider so relatively few objects (compared to the many that there are) it is also possible for a predicate to be more unclear than we think it is.)

Another feature of the sets of sentences of kind 1 through 4 is that these sets are not necessarily mutually exclusive; i.e. we must leave open the possibility that our

speaker's analyticity intuitions are inconsistent. One way in which they might be inconsistent is as follows. Suppose the speaker firmly believes some sentence S to be synthetic, but that it is then shown that S is a logical consequence of sentences which he believes to be analytic. Assuming that our speaker believes that only analytic sentences can be logical consequences of analytic sentences and that he believes the claim that S is such a logical consequence we will end up with S being believed to be both analytic and synthetic.

In what follows I will, in order to avoid the tiresome parenthetical expression 'or would be believed to be, upon appreciation of some appropriate procedure', coin the expression 'believes_w' an expression which will be considered to be equivalent to 'believes, or upon application of some appropriate procedure, would believe to be'.

Let us assume that the predicate 'sentence of kind K ' is defined for a formalised language L_0 in such a way that it is clear at each sentence of that language. In order for this predicate to be called an analyticity predicate it will have to fulfill the following conditions.

1. If a sentence of English is believed_w to be analytically true (false) in English then its best L_0 paraphrase is believed_w to be true (false) and a sentence of kind K .
2. If a sentence of English is believed_w to be synthetic in English then its best L_0 paraphrase is believed_w to be not a sentence of kind K .

Notice that the question of whether a sentence is believed_w analytic in English is independent of the question of whether a sentence of L_0 is believed_w to be a sentence of kind K. We have some predicate defined for L_0 . We then look to see whether this predicate satisfies conditions 1 and 2. Whether or not a sentence of L_0 is believed_w to be a sentence of kind K is a direct or indirect result of linguistic convention, or linguistic fiat. That is, it is the result of the definition of 'sentence of kind K', a definition which is itself true by fiat. But after this definition is laid down it is no longer a matter of convention or fiat whether or not the relations between English and L_0 are such that conditions 1 and 2 are satisfied.

However, when we come to consider those English sentences at which 'analytic in English' is not clear, convention or fiat enters the picture again, although in a different way. For these sentences we stipulate, by fiat, that they shall be believed analytically true (false) if their best paraphrases are believed_w true (false) and of kind K, and also that if their best paraphrases are believed_w to be not of kind K then they shall be believed to be synthetic. Let us call this stipulation the explication stipulation.

The basic idea behind the way in which this procedure clarifies 'analytic in English' is as follows. If the predicate 'sentence of kind K', defined for the sentences of L_0 , fulfills conditions 1 and 2 then the structure of L_0 mirrors that of English well enough at those English sentences

at which 'analytic in English' is clear to warrant the claim that the predicate 'sentence of kind K' is an analyticity predicate. It is hard to see what more could be required to support such a claim. And if any less were required then it is hard to see what warrant there would be for calling 'sentence of kind K' an analyticity predicate. (See below for a discussion of the suggestion that we might want to require less in order to permit the definition of 'sentence of kind K' to "educate our intuitions".) Now for those English sentences at which 'analytic in English' is not clear the explication stipulation, together with the fact that 'sentence of kind K' is clear at each sentence of L_0 , provides us with a search procedure for 'analytic in English' at each sentence of English, or at least at "more" of those English sentences than we had before.

Thus, 'analytic in English' is clearer after the introduction of the procedure described than it was before its introduction. I stop short of saying that this procedure makes 'analytic in English' completely clear (i.e. clear at each English sentence) because of the fact that the predicate 'x is the best paraphrase of y' may not be clear at each ordered pair, the first member of which is a sentence of L_0 and the second member of which is a sentence of English. In other words there may be English sentences which we just don't know how to paraphrase into L_0 . In this case the function corresponding to 'x is the best L_0 paraphrase of y' will be only a partial function.

(I should take this opportunity to mention that I am assuming that if 'analytic in English' is clear at some English sentence then we will know how to paraphrase this sentence into L_0 . Without this assumption it would seem difficult to support the claim that the use of an artificial language can clarify the predicate 'analytic in English'. Now I think that this assumption is true on independent grounds. For, if we know the meaning of an English sentence well enough to believe_w that it is analytic or synthetic then it would seem that we ought to know it well enough to know how to paraphrase it into L_0 . But if it should turn out that this is not so then we can still repair the situation by just arbitrarily taking any L_0 sentence believed to be of kind K to be the paraphrase of an English sentence we don't know how to paraphrase and which is believed_w to be analytic, and also arbitrarily taking some L_0 sentence which is to be not of kind K to be the paraphrase of any English sentence we don't know how to paraphrase and which is believed_w to be synthetic. This procedure would, of course, still not make the function associated with 'x is the best L_0 paraphrase of y' a total function. It would still be a partial function because there still might be English sentences which are neither believed_w to be analytic nor believed_w to be synthetic and which we don't know how to paraphrase into L_0 .)

It ought to be remembered, at this point, that our task is not to clarify 'x is the best paraphrase of y' but to answer the question of how the use of an artificial language

can clarify 'analytic in English' given the assumption that this latter predicate is not as clear as 'x is the best paraphrase of y'. (But see below for one condition which I want to place on the paraphrasing function.) Moreover, this assumption certainly seems to be true, for there seem to be many English sentences we know how to paraphrase (into some appropriate L_0) but at which 'analytic' is not clear. The complete clarity of every notion is probably an impossible goal. But the clarification of some notions in terms of others which are clearer not only seems possible but constitutes one of the important goals of philosophy.

The general procedure outlined above can be said to fill in analyticity gaps, in analogy with the process of filling in truth value gaps provided by the process of paraphrasing English sentences into an artificial language. The one procedure seems neither more nor less acceptable than the other.

I would now like to take up several points merely alluded to earlier. The first of these points concerns a condition which I would want to place on the paraphrasing function. The condition is that paraphrasing should preserve belief. What this means is that if a sentence of English is believed to be true (false) then its best L_0 paraphrase is believed to be true (false), (although not necessarily conversely). It also means that if a sentence of English is such that it would be believed to be true (false) upon presentation of all the available evidence then its best L_0 paraphrase is also believed to be true (false).

Notice that this condition does not require that the relation between some English sentence and its best paraphrase be one of synonymy.

A reason for laying down the paraphrasing condition is that if we don't do so then we will be blurring an important distinction between clarification and rational reconstruction. If, for example, someone paraphrases the sentence 'Whales are fish' into a scientific language in which the paraphrase of this sentence is (believed) false then he should not be considered as clarifying the ordinary notion of fish but rather as attaching a new meaning to 'fish' so as to be able to more easily come up with new and simple laws about nature. But there is a big difference between clarifying the meaning which we presently attach to a word and attaching a new meaning to that word. In the one case we could be said to be sharpening up the present meaning of a word. But in the other case we are just ignoring or riding roughshod over this present meaning. (Ordinary language philosophers seem to appreciate this point more than some of their more formalistically inclined bretheren.) Rational reconstruction has its place. But it should not be confused with clarification.⁸

The thoughts in the previous paragraph bring me to a similar point about the clarification of analyticity which was alluded to earlier. It might be suggested that conditions 1 and 2 are too strong because they don't permit the paraphrasing of a sentence into L_0 to "educate our intuitions". According to this suggestion we should permit at least some

English sentences which we believe_w to be synthetic to be paraphrased into an L_0 sentence which is believed_w to be of kind K, and thus to "educate our analyticity intuitions. There seems to be at least two things wrong with this suggestion. First of all, I suspect that it may issue from a confusion between clarification of 'analytic' and a rational reconstruction of it. Secondly, and more importantly, this suggestion seems to issue from a neglect of the fact that 'sentence of kind K' is completely autonymous within the framework of the artificial language. One way to appreciate this autonymy is to recall that the question of whether an L_0 sentence is believed_w to be of kind K is independent of the question of whether an English sentence is believed_w to be analytic. Now certainly if 'sentence of kind K' fulfills conditions 1 and 2 then we can say that it is an analyticity predicate for L_0 . And under these conditions someone might even say that 'sentence of kind K' means, for all intents and purposes, 'analytic in L_0 '. But the point is that if conditions 1 and 2 are not fulfilled (as the suggestion about "educating our analyticity intuitions says they may not be fulfilled) then 'sentence of kind K' is simply not an analyticity predicate for L_0 and thus cannot be said to mean 'analytic in L_0 '.

I can imagine someone responding to this by saying that if there are "strong analogies" between 'analytic in English' and 'sentence of kind K' then this is enough to show that this latter predicate is an analyticity predicate

for L_0 and that it means 'analytic in L_0 ' even though there may be some English sentences which we believe_w to be synthetic but whose L_0 paraphrases are believed_w to be of kind K.⁹ My response to this is that if we accept this "strong analogies" criterion of adequacy the result is that we are not clarifying our intuitions about 'analyticity in English' but are just ignoring them.

But, it may be objected, what of our earlier claim that we must leave open the possibility that our intuitions about 'analytic in English' are inconsistent? Doesn't this show that conditions 1 and 2 are too strong? Consider, for example, the possibility that we have very strong reasons for believing that some English sentence is analytic and equally strong reasons for believing that it is synthetic. (To help the imagination think of 'analytic' in analogy with 'is a member of itself', 'synthetic' in analogy with 'is not a member of itself', and some English sentence in analogy with the class which contains all and only those classes which are not members of themselves.) Wouldn't this show that we should ride roughshod over our analyticity intuitions in this case, at least, by paraphrasing this sentence which we strongly believe to be synthetic in English into an L_0 sentence which is believed_w to be of kind K? And if we did so then, although we would be satisfying condition 1, we would be violating condition 2, but with good reason.

The flaw in this reasoning is contained in its implicit assumption that 'sentence of kind K' is consistent in the

special sense that it is impossible for one to have evidence that some L_0 sentence is of kind K and equal evidence that it is not of kind K. But we have no guarantee that 'sentence of kind K' is consistent in this sense. And if it is inconsistent in this sense then it is possible for both conditions 1 and 2 to be satisfied.

Moreover, and this is an important point, if we did have a guarantee that 'sentence of kind K' is consistent in our sense then paraphrasing English sentences into an artificial language could never be one of the means by which to show that 'analytic in English' is inconsistent in our sense. On this way of looking at the situation we would always have to blame the paraphrasing rather than conclude that our analyticity intuitions are inconsistent. What I mean can be seen by considering the following kind of case. We have some English sentence S which, let us suppose, we believe to be synthetic. We then paraphrase it into an L_0 sentence S_0 which we believe to be not of kind K. So far so good. But then later on we come across equally good evidence that it is of kind K. (Think, by analogy, of a situation where one day someone gives an argument for the claim that Russell's set (i.e. the set of all sets that are not members of themselves) is not a member of itself, and so believes that it is not a member of itself. But he has a short memory and the next day he gives an equally good argument for the claim that Russell's set is a member of itself, and so believes that it is a

member of itself. Upon being reminded of the argument of the previous day he concludes that his notions of set and set membership are inconsistent. (Although he has a short memory he is not irrational.))

Suppose that after careful checking we are just forced to the conclusion that 'sentence of kind K' is inconsistent. What then are we to say about the English sentence S? According to the suggestion that I want to reject, one of the things we should never conclude is that our analyticity intuitions are inconsistent. According to this suggestion we should conclude, instead, that S_0 was not really the best paraphrase of S. But if the only reason for such a conclusion is that we don't take this route then we would have to conclude that our analyticity intuitions are inconsistent then my answer is that this is a poor reason. It is poor because it just begs the question in favor of the claim that our analyticity intuitions are consistent. (Notice, incidentally, that if we did conclude that 'analytic in English' is inconsistent then rational reconstruction, as opposed to clarification, would be in order.)

Let us turn now to some issues connected with the interpretation of the artificial language. There is one point which needs to be mentioned, especially for the sake of those who feel uncomfortable with the notion of an artificial language. I have, for the sake of generality, considered the case of an artificial language none of whose sentences are sentences of English. A language, artificial

or otherwise, has to have an interpretation in order to be a language. A language can have an interpretation without one knowing what that interpretation is. (An example in my case is Spanish, a language whose interpretation I am ignorant of.) But, of course, for a language to be useful one must know its interpretation. As mentioned earlier, what exactly one is doing when one gives an interpretation of an artificial language can be described in more than one way. But the minimum requirement for an interpretation of a language is that it should give us the truth conditions for each of its sentences.¹⁰ Typically, this is done by giving these truth conditions in terms of a metalanguage we really understand. For English speakers this metalanguage will be English. But if an artificial language is to have any philosophical use we cannot permit the metalanguage to contain just any sentence of plain old ordinary English. Rather it must contain only those English sentences whose syntactical structure and truth conditions are themselves unproblematic. Nothing would be gained if we paraphrased the sentence 'The present king of France is bald' into the L_0 sentence 'Fa' whose truth conditions were given by saying that 'a' denotes the present king of France, 'F' denotes the class of bald things, and 'Fa' is true just in case the present king of France is bald, or by paraphrasing 'The absolute is lazy' into this same sentence whose truth conditions were given by saying that 'a' denotes the absolute, 'F' denotes the class of lazy things, and 'Fa' is true just in case the absolute is lazy.

Whether the sentences of an artificial language are sentences of (some portion of) English or whether they are sentences composed of artificially constructed symbols, the end result of paraphrasing a sentence of English into an artificial language can be described as either a direct or indirect paraphrasing of an English sentence into some restricted and unproblematic part of English.

We need not think of the relation between a sentence S and its best paraphrase S' as being one of synonymy. In our paraphrasing condition we have already mentioned one restraint on the relation between S and S'. A further aspect of this relation is well expressed by Quine.

Its relation to S is just that the particular business that the speaker was on that occasion trying to get on with, with help of S among other things, can be managed well enough to suit him by using S' instead of S. We can even let him modify his purposes under the shift, if he pleases.

Hence the importance of taking as the paradigmatic situation that in which the original speaker does his own paraphrasing, as laymen do in their routine dodging of ambiguities. The speaker can be advised in his paraphrasing, and on occasion he can even be enjoined to accept a proposed paraphrase or substitute another or hold his peace; but his choice is the only one that binds him. A foggy appreciation of this point is expressed in saying that there is no dictating another's meaning; but the notion of there being a fixed, explicable, and as yet unexplained meaning in the speaker's mind is gratuitous. The real point is simply that the speaker is the one to judge whether the substitution of S' for S in the present context will forward his present or evolving program of activity to his satisfaction.¹¹

(Some of what Quine says here is pretty vague. But when he talks of letting the speaker modify his purposes under the shift, I would disagree if this includes letting him

change his purpose from clarification to rational reconstruction.)

In this passage Quine rejects the notion of there being a fixed, explicable, and as yet unexplained meaning in the speaker's mind. This view of Quine's is familiar, and is part and parcel of his rejection of the notion of meaning and of his thesis of the indeterminacy of translation. Closely similar to the view that a sentence has a fixed unique meaning is the view that there is a fixed unique ideal language into which all problematic sentences are to be paraphrased. Whether these two views are correct is not part of our present concerns. But I mention them only to set the stage for another comment which is part of our present concerns. Even if there were a unique ideal language into which all problematic sentences were to be paraphrased (call this language L_0) the analyticity of a sentence of English at which 'analytic in English' was originally unclear would still be relative to the definition of 'sentence of kind K'. Even under the assumption of an ideal language there might still be many different definitions of 'sentence of kind K', all of which would satisfy conditions 1 and 2, but which would differ in assignments of analyticity to those English sentences at which 'analytic in English' was originally unclear. But this is unobjectionable since, before the introduction of an artificial language, those sentences at which 'analytic in English' was unclear were neither analytic nor synthetic in English. For these sentences the claim that

any given one of them is analytic is neither true nor false. Consequently it doesn't matter if one definition of 'sentence of kind K' has the result that one of these sentences is analytic and another definition has the result that it is synthetic. As long as these definitions of 'sentence of kind K' satisfy conditions 1 and 2 these predicates will be analyticity predicates and will be equally acceptable, provided that there are not further reasons for preferring one over the other.

Chapter 4

Summary

Although analyticity is a semantical notion, its primary interest lies in its epistemological function. Calling a sentence analytically true is supposed to account for our belief in or knowledge of its truth. But, as we have seen, when we get more specific about the vague notion of "accounting for" we see that the appeal to analyticity doesn't seem to provide such an account.

In the first place, we have seen in detail why analyticity has no power to explain our belief in or knowledge of the truth of a sentence. This lack of explanatory power is analogous to the fact that appealing to the dormitive virtue of opium doesn't explain why opium puts people to sleep.

In the second place, the claim that a sentence is analytically true doesn't provide a good justification for the claim that it is true, since the claim that a sentence is analytic is never known with more certainty or believed to a greater degree than the claim that it is true. This criticism remains even if we take the general view that no sentence is, or can be, known with complete certainty. The criticism is not that analyticity has justificatory power only if the analyticity of a sentence can be known with complete certainty. The fact that we may change our minds about whether a sentence is analytic and thus withdraw previous attributions of analyticity is not part of the criticism. The criticism is rather that at any given time

we are no surer of the analyticity of a sentence than we are of its truth. It is this fact which robs analyticity of any justificatory power which it might otherwise have. Since analyticity is primarily an epistemological notion, I consider the fact that this notion has the power to neither explain nor justify to be the most serious of the criticisms of analyticity which have been considered in this work.

Another criticism of analyticity which we considered is the claim that this notion is not clear enough to be useful. When used in an unreflective way, as it normally is, the word 'unclear' can cover a multitude of sins. But in Section 4 of Chapter 1 I have tried to isolate an important sense of 'unclear' and have tried to show that analyticity is unclear in this sense. One of the presuppositions of my analysis of clarity is that if a predicate F is unclear at an object a , in the sense that we neither believe it to be true that a is an F nor believe it to be false that a is an F , and furthermore do not know what to do to gain evidence for the claim that a is an F , then the claim that a is an F is neither true nor false. Now there are many sentences which rival 'All bachelors are unmarried' in the extent to which we believe them to be true, but are such that 'analytic' is not clear at them. Such sentences are neither analytic nor synthetic. Examples of such sentences might include the axiom of choice and 'I exist'. (Let it not be said that such sentences are perhaps synthetic a priori, for if they are neither analytic nor synthetic then they are not synthetic

a priori either.) In Section 3 of Chapter 1 we saw that the notion of analyticity has no explanatory power even in the case of those sentences which were clearly analytic. But now, when we come to consider the unclarity of 'analytic' we can see a new way in which this unclarity might show a further weakness in the explanatory power of analyticity. For if there are sentences which are neither analytic nor synthetic but which rival 'All bachelors are unmarried' in the extent to which we believe them to be true then we may well begin to suspect that perhaps even in the case of 'All bachelors are unmarried' we do not really explain our belief in its truth by saying that it is analytic. We may well begin to suspect that 'analytic' has no more to it than the less exciting word 'obvious'.

In Section 1 of Chapter 2 we saw that the attempt to "explain away" the difficulty in deciding whether a sentence is analytic by blaming this difficulty on the obscurity or unclarity of the words in the sentence ultimately presupposes the notion of intensional obscurity, a notion which is just as unclear and problematic as that of analyticity.

The unclarity of 'analytic' and its cognates, such as 'means the same as' pops up to plague us again when we consider the question of whether there are any analytically true sentences. There certainly seem to be such sentences. And one characteristic which is often said to be a defining characteristic of analytically true sentences is that if anyone disagrees with us as to the truth of such a sentence

then he must be using this sentence with a different meaning than it normally has. If this property is taken to be a 'defining' property of analyticity then the question arises of whether there are any sentences which have this property. In Section 5 of Chapter 2 I have taken an arbitrarily chosen sentence which seems to be analytic (i.e. the sentence 'Everything is self identical') and have considered various things which we might conclude from the fact that someone disagreed with us as to the truth of this sentence. These various possible conclusions are:

1. The person in question means something different by his utterance than what it is normally taken to mean.
2. He doesn't mean something different.
3. The question of whether he means something different is meaningless.

The question of the clarity or unclarity of the expression 'means the same as' enters the picture when we consider conclusion 3. If someone said that nothing is self identical then perhaps we might want to conclude that he is using these words to mean something different than what we normally take them to mean. If, however, he says that certain strange particles are not self identical although everything else is, then we may very well conclude that it is meaningless to ask whether the sense of his words are the same as the sense of our words. How are we to decide whether or not he is using these words in the same or a different sense? Needless to say, it won't do to pound the table and say that he must be

attaching a different meaning to 'identical with' than we normally do. For this is a question presumably to be decided by evidence. I can, of course, dictate my own meaning; i.e. I can declare by fiat that I am using two expressions synonymously. But in the intersubjective case we are considering the question of whether one person attaches the same meaning to an expression as another person is a question for which the request for evidence is relevant, provided of course that the question is not meaningless. And if the request for evidence is considered irrelevant then we would have to conclude that the question of intersubjective synonymy is meaningless; i.e. the claim that our speaker is attaching a different meaning to 'identical with' is neither true nor false.

If conclusion 2 is taken then it follows that the sentence 'Everything is self identical' is not analytically true.

Conclusion 1 can be further subdivided into 2 possibilities:

- 1a. The person's utterance can be translated into a sentence we already understand.
- 1b. His utterance cannot be translated into any sentence we already understand.

Under 1b. we would still be free to say that in our language it is analytically true that everything is self identical. But this would be small comfort if we had reason to believe that the person's utterance was true because of

the fact that it was part of a theory which was successful in explaining and predicting phenomena.

In order to show that 'Everything is self identical' is analytically true, in any interesting sense, the friends of analyticity would have to show that conclusion 1a will always be the most reasonable conclusion to draw from the fact that someone disagrees with the truth of this sentence. However, I know of no good reasons for such a claim.

The question of whether there are any analytically true sentences can also be approached by considering the question of whether there are any such things as meanings. For if there are no such things as meanings then there are no sentences which are true in virtue of their meaning or in virtue of sameness of meaning of some of their constituent parts.

The claim that there are no such things as meanings in the required sense can be supported by a pragmatic argument to the effect that postulation of meanings is not required in order to describe successful translation and communication. For if a theoretical kind of entity is not required in the service of our descriptive and explanatory purposes then this is good evidence that there are no entities of that kind. In Section 5 of Chapter 1 I gave arguments for the claim that the most that is required to describe successful translation and communication is the notion of coextensiveness, or sameness of reference, and that the further notion of synonymy or sameness of meaning is not required.

The notion of the utility of analyticity also arose in Section 2 of Chapter 2 when we gave arguments for the claim that even if the languages that you and I spoke were ideal in the sense that 'analytic' was clear at each of their sentences this would not necessarily result in an increase in communication and understanding between us or reduce the possibility of merely verbal disagreements between us. For the fact that the language I speak has the same analytically true sentences as the language you speak does not at all guarantee that any given expression means the same to you as it does to me. The belief that it does provide such a guarantee may arise from neglecting the distinction between intrasubjective and intersubjective synonymy.

One way to supposedly guarantee that there are analytically true sentences is to declare by fiat that a sentence shall be analytically true or that two expressions shall be synonymous. This seems to work especially well on expressions which do not have any meaning prior to the fiat, as in the case where we introduce a new symbol for abbreviatory purposes. Even here however, Quine has argued that language works in such a way that a sentence declared analytically true by fiat at one time will become incorporated into the language in such a way that the artificiality of its analyticity and of its truth will be lost during subsequent developments, and at a later time it may suit our purposes to consider this sentence as being falsified by further experiences. The friends of analyticity may well want to say that if this happens then

it shows that we have changed our language. But such a response merely begs the question of the intelligibility of the distinction between changing our language and changing our beliefs without changing our language.

The weakness of fiat in instituting truth can be seen in a particularly clear light when we consider the case where we have a set of sentences each one of which is declared true by fiat. In such a case there is no guarantee that we won't be able to later on derive a contradiction from this set of sentences. And if we were to derive such a contradiction then not all of the sentences in the set would be true, in spite of the fact that all of them were originally declared true by fiat. Notice that this last point does not presuppose that the non-logical expressions of the sentences declared true by fiat have any independent meaning, or to put the same point differently, the derivation of a contradiction need not depend on the meanings, if any, of the non-logical expressions in the sentences.

Another point that we made about the notion of truth by fiat or analyticity by fiat was that this notion would not help us in justifying a claim that a sentence already in use (such as 'All bachelors are unmarried') is analytic since we will be less certain about a historical claim to the effect that this sentence was once declared true by fiat than we will be about the claim that this sentence is true, or analytically true.

A question we considered in Section 3 of Chapter 2 was the question of whether claims of interlinguistic synonymy were settleable by legitimate standards of scientific procedure. We examined Carnap's criterion of synonymy and found that it had two defects. First of all it was subject to a kind of circularity. In order to apply this criterion of synonymy we had to already know, at least in part, what the criterion was supposed to provide us with. It was seen that this circularity was only partial, although seeing it as partial required us to suppose the dubious claim that when we learn a foreign language in the way a native might we are attaching the same "meanings" to the foreign expressions as the native does.

Secondly, we saw that Carnap's criterion doesn't provide one of the things which we could reasonably want such a criterion to provide us with; i.e. increased clarity of the predicate 'synonymous', i.e. more clarity than we had before the introduction of the criterion.

One of the most prominent characteristics of many definitions of 'analytic' is that they indirectly presuppose the very notion to be defined, or others which are equally problematic (and in the same way). One of these definitions was Grice and Strawson's understanding-believing definition of analyticity. One definition which didn't seem to have this question begging characteristic was Grice and Strawson's definition of sentential synonymy in terms of sameness of confirming and disconfirming experiences, a definition which grows out of the verifiability theory of meaning. (We could

then define analyticity in terms of sentential synonymy.) This definition was seen to be not precise enough, although worthy of further development. However, there did not seem to be any hope that such a further development would provide much material for answering the objection that the notion of analyticity has neither explanatory nor justificatory power.

Another definition which didn't seem to presuppose notions which are equally problematic as the notion being defined was a definition of intralinguistic intrasubjective sentential synonymy in terms of stimulus synonymy. We saw that although the latter notion is a better reconstruction of the former notion than Quine thinks it is, it still falls short.

In Section 9 of Chapter 2 we examined the hope that perhaps some day the notion of meaning could be made legitimate by the process of correlating meanings with brain states. However, the carrying out of such a program seemed to rest on the dubious claim that we learn the use of our words in a step-by-step one-by-one fashion. It was also seen to rest on a confusion between intersubjective and intrasubjective synonymy as well as on the subtractive fallacy which claims that if an expression is meaningful or significant then there is a meaning which it has.

Since Carnap is the foremost friend of analyticity and since he has considered artificial languages to be a most useful tool for the investigation of philosophical problems

we have, in Chapter 3, considered the way in which the use of an artificial language can clarify the notion of analyticity. We also gave a criterion of adequacy to be used in judging whether a predicate, defined for a formal language, is an analyticity predicate for that language.

FOOTNOTES

1. See Willard Van Orman Quine, Word and Object (Cambridge, Mass., 1960), pp. 56, 57, 66, 67. Talk of "verbal links", "verbal connections", and "semantic anchorings" seems no more enlightening than talk of synonymy. See also Quine's reply to Stroud in Willard Van Orman Quine, "Relies," in Words and Objections: Essays on the Work of W. V. Quine, eds. Donald Davidson and Jakko Hintikka (Dordrecht, Holland, 1969), pp. 316-319. Here Quine points out the utility of a translator being able to deal with sentences wholesale by abstracting shared skeletal forms. While this utility is undeniable, it doesn't seem to provide a basis for an explanation of the analytic appearance of apparently analytic sentences.
2. Gilbert Harman, "Quine on Meaning and Existence, I," Review of Metaphysics, 21 (1967-1968), pp. 125, 127.
3. Ibid., p. 127.
4. Quine, Word and Object, p. 38. Hereafter referred to as "WO".
5. See Rudolf Carnap, An Introduction to the Philosophy of Science, ed. Martin Gardner (New York, 1966), pp. 260, 267. Arthur Pap, Semantics and Necessary Truth (New Haven, 1958), p. 423. Rudolf Carnap, "Meaning and Synonymy in Natural Language," in Meaning and Necessity (Chicago, 1967), p. 233.
6. Willard Van Orman Quine, "Two Dogmas of Empiricism", in From a Logical Point of View (New York, 1963), p. 36.
7. Ibid.
8. Willard Van Orman Quine, "Carnap and Logical Truth," in The Philosophy of Rudolf Carnap, ed. Paul Arthur Schilpp, The Library of Living Philosophers, XI (London, 1963), p. 390.
9. Philip Kitcher has taken this view (in private conversation) of what Quine is objecting to in the notion of analyticity. I owe this interpretation of Quine to Kitcher.
10. Harman, p. 129.
11. Quine, "Carnap and Logical Truth", p. 390.
12. See Carnap's reply to Quine in Schilpp, p. 917.
13. Ibid., p. 922.

14. Harman, pp. 125, 127.
15. Quine, "Two Dogmas of Empiricism", p. 32.
16. H. P. Grice and P. F. Strawson, "In Defense of a Dogma", in Analyticity, eds. James F. Harris, Jr. and Richard H. Severens (Chicago, 1970), p. 69.
17. Ibid., p. 58.
18. Harman, p. 138.
19. Ibid.
20. Quine, "Two Dogmas of Empiricism", p. 26.
21. WO, p. 207.
22. Quine, "Carnap and Logical Truth", p. 403.
23. WO, p. 206.
24. Quine, "Carnap and Logical Truth", p. 402.

Chapter 2

1. This kind of move is made by Carnap in "Meaning and Synonymy in Natural Languages", p. 240.
2. Grice and Strawson, p. 69.
3. Ibid.
4. This distinction is similar to Carnap's distinction between extensional and intensional vagueness in "Meaning and Synonymy in Natural Languages." I say 'similar to' rather than 'identical with' because it is not sufficiently clear to me, from what Carnap says, whether his notion of extensional vagueness is such that a predicate F is extensionally vague for some person if an actual object about which the person is undecided as to whether it is an F must also be an object which the person believes to be actual. At any rate, my definition of extensional obscurity doesn't make this belief requirement with respect to the existence of the object concerned.
5. See WO, pp. 194, 195 for an explanation of this notion.
6. Cf. Willard Van Orman Quine, "Notes on the Theory of Reference," in From a Logical Point of View (New York, 1963), p. 138.

7. As is done by Carnap in "Meaning and Synonymy in Natural Languages", p. 240.
8. Rudolf Carnap, "Meaning Postulates", in Meaning and Necessity (Chicago, 1967), p. 225.
9. Gilbert Ryle, "Discussion: Meaning and Necessity", Philosophy, 24 (1949), pp. 69-76.
10. Carnap, "Meaning and Synonymy in Natural Languages".
11. Ibid., p. 238.
12. Grice and Strawson, p. 67.
13. Ibid.
14. Ibid., p. 66.
15. WO, p. 66.
16. WO, p. 206.
17. Quine in Schilpp, p. 387. See also WO, pp. 58, 59. Quine makes his comments about pre-logical peoples with reference to truth functional tautologies. But it seems to me that ' $(x)(x=x)$ ' is no less a logical truth than a statement of the form 'p or not p'. Moreover, one could construct a story (albeit more complicated) similar to the one about the strange particle theory using some truth functional tautology instead of ' $(x)(x=x)$ '.
18. Quine, "Carnap and Logical Truth", pp. 394, 395.
19. Quine, "Two Dogmas of Empiricism", p. 26.
20. Quine, "Carnap and Logical Truth", pp. 394, 395.
21. Quine, "Two Dogmas of Empiricism", p. 38.
22. Ibid., p. 41.
23. Ibid., p. 40.
24. Grice and Strawson, pp. 71, 72.
25. WO, p. 64.
26. Ibid., p. 62
27. Ibid., p. 63.
28. Willard Van Orman Quine, "On the Reasons for Indeterminacy of Translation", Journal of Philosophy, 67 (1970), pp. 178-183.

29. WO, p. 54.
30. Ibid., p. 63.
31. Ibid.
32. See Quine's comment on p. 206 of WO against what he calls the subtractive fallacy involved in the claim that if an expression is meaningful then there must be a meaning which it has.

Chapter 3

1. See Quine, Section VIII, in "Carnap and Logical Truth" and Section 4 of "Two Dogmas of Empiricism."
2. The Encyclopedia of Philosophy, ed. Paul Edwards, Vols. I and II (New York, 1967), p. 168.
3. E. W. Beth, "Carnap's Views on the Advantages of Constructed Systems Over Natural Languages in Philosophy of Science", in The Philosophy of Rudolf Carnap, ed. Paul Arthur Schilpp, The Library of Living Philosophers, XI (London, 1963), footnote 56, p. 492.
4. Herbert G. Bohnert, "Carnap's Theory of Definition and Analyticity", in The Philosophy of Rudolf Carnap, ed. Paul Arthur Schilpp, The Library of Living Philosophers, XI (London, 1963), p. 421.
5. Quine, "Notes on the Theory of Reference", p. 138.
6. Bohnert, pp. 416, 147.
7. Quine, "Two Dogmas of Empiricism", p. 33.
8. Thus, I agree with Hanna in upholding the distinction between clarification and rational reconstruction. See Joseph Hanna, "An Explication of 'Explication'," in Philosophy of Science, 35 (1968), pp. 28-44. On page 41 of his article Hanna lists four possible attitudes towards what in his paper is called the correspondence condition. Hanna opts for view (c). My own view seems to be closer to view (a). However, I find it difficult to compare his views with mine. This is due to several factors. First of all, to the extent that the notion of a definitive intension is clear to me, it seems that 'analytic' has no definitive intension. Secondly, it is not sufficiently clear to me whether Hanna's correspondence condition requires the explicandum and explicatum to merely be believed to be coextensive or

to actually be coextensive. (The remarks in section 8 of his paper, as well as his example, on page 37, about objects which are known to be fish suggest the latter (since knowledge implies truth).). Thirdly, in the case of 'analytic in English' I find it difficult to make a distinction between a situation in which this explicandum has been given a "preliminary clarification" and a situation where it has not. Has this predicate, at the present state of philosophical research, already been given a "preliminary clarification"?

9. For an exposition of the "strong analogies" view, and of the related idea that 'x is an analyticity predicate for L' is a recipe term, see Bohnert, pp. 421, 422.
10. See Donald Davidson, "Truth and Meaning", Synthese, 17 (1967), pp. 304-323 for a development of this idea.
11. WO, p. 160.

BIBLIOGRAPHY

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(This list includes only such works as happen to have been alluded to, by title or otherwise, in the course of the book.)

- Beth, E. W., "Carnap's View on the Advantages of Constructed Systems Over Natural Languages in Philosophy of Science", in The Philosophy of Rudolf Carnap, ed. Paul Arthur Schilpp. The Library of Living Philosophers, XI (London: Cambridge University Press, 1963), pp. 469-502.
- Bohnert, Herbert G., "Carnap's Theory of Definition and Analyticity", in The Philosophy of Rudolf Carnap, ed. Paul Arthur Schilpp. The Library of Living Philosophers, XI (London: Cambridge University Press, 1963), pp. 407-430.
- Carnap, Rudolf, An Introduction to the Philosophy of Science, ed. Martin Gardner (New York: Basic Books, 1966).
- _____, "Meaning and Synonymy in Natural Languages", in Meaning and Necessity (Chicago: University of Chicago Press, 1967), pp. 233-247.
- _____, "Meaning Postulates", in Meaning and Necessity (Chicago: University of Chicago Press, 1967), pp. 222-229.
- Davidson, Donald, "Truth and Meaning", Synthese, 17, (1967), pp. 304-323.
- The Encyclopedia of Philosophy, ed. Paul Edwards, Vols. I and II (New York: Collier-Macmillan, 1967).
- Grice, H. P. and Strawson, P. F., "In Defense of a Dogma", in Analyticity, eds. James F. Harris, Jr., and Richard H. Severens (Chicago: Quadrangle, 1970), pp. 54-74.
- Hanna, Joseph F., "An Explication of 'Explication'", Philosophy of Science, 35 (1968), pp. 28-44.
- Harman, Gilbert, "Quine on Meaning and Existence, I", Review of Metaphysics, 21 (1967-68), pp. 124-151.
- Pap, Arthur, Semantics and Necessary Truth (New Haven: Yale University Press, 1958).
- Quine, Willard Van Orman, Word and Object (Cambridge, Mass.: M.I.T. Press, 1960).

Quine, Willard Van Orman, "Two Dogmas of Empiricism", in From a Logical Point of View (New York: Harper & Row, 1963), pp. 20-46.

_____, "Notes on the Theory of Reference", in From a Logical Point of View (New York: Harper & Row, 1963), pp. 130-138.

_____, "Carnap and Logical Truth", in The Philosophy of Rudolf Carnap, ed. Paul Arthur Schilpp. The Library of Living Philosophers, XI (London: Cambridge University Press, 1963), pp. 385-406.

_____, "Replies", in Words and Objections: Essays on the Work of W. V. Quine, eds. Donald Davidson and Jakko Hintikka (Dordrecht, Holland: Reidel, 1969), pp. 316-319.

_____, "On the Reasons for Indeterminacy of Translation", Journal of Philosophy, 67 (1970), pp. 178-183.

Ryle, Gilbert, "Discussion: Meaning and Necessity", Philosophy, 24 (1949), pp. 69-76.

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