

AN EXAMINATION OF THE  
SYNTHETIC-ANALYTIC DISTINCTION

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by  
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## ABSTRACT

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by Agnes Elizabeth Muir

The purpose of this thesis is to review the current controversy regarding the distinction between synthetic and analytic statements and to appraise the arguments for and against the validity of this distinction. The arguments which have been put forth against the validity of this distinction fall into two main classes: (1) arguments designed to establish that there are no non-repetitive analytic statements; and (2) arguments to show that we cannot tell whether any given non-repetitive statement is or is not analytic.

The main arguments designed to show that there are no non-repetitive analytic statements, as well as the comments philosophers have made regarding these arguments, are examined. These comprise an argument by Goodman which is based on his own special criterion of synonymy and an argument, attributed to Mates, based on the alleged fact that no words are interchangeable salva veritate in all non-linguistic statements. The conclusion reached in this study is that neither of these arguments gives us ground for asserting that there are no non-repetitive analytic statements.

Next the arguments of Quine, White, and Waismann to

show that we cannot tell if a non-repetitive statement is analytic are reviewed, as well as Quine and White's contention that the synthetic-analytic distinction is one of degree rather than of kind. The criticisms which these men have made of suggested criteria of analyticity are outlined, while the problems involved in deciding whether a given non-repetitive statement is analytic are considered. Although it seems that these proposed criteria are not satisfactory, it is maintained here that this does not entail the conclusion that the synthetic-analytic distinction is one of degree.

Finally, the very request of the opponents of the synthetic-analytic distinction for one criterion of analyticity that is applicable to all cases of allegedly analytic statements is criticized, while in addition a method is proposed for deciding, with a high degree of probability, whether any non-repetitive statement is or is not analytic. The conclusion arrived at is that although many of the views associated with analyticity are erroneous, the distinction itself is, after all, valid.

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## CHAPTER I

### INTRODUCTION

The distinction between synthetic and analytic judgements dates back at least to the time of Kant. Long before Kant, of course, philosophers had tried to achieve a satisfactory classification of statements, and in doing so had come to conclusions which in certain respects resemble those of Kant. Although Kant's distinction met with some criticism from idealist logicians, it was accepted without question by realist philosophers in the twentieth century; while the assumption underlying the application of this distinction is, as we shall see, basic to the contemporary movement known as "philosophical analysis". In 1949, however, both the distinction and the underlying assumption were challenged by a small group of able and influential philosophers. But before reviewing the ensuing debate, I wish to consider in some detail the history of the synthetic-analytic distinction, and to point out what is at stake when this distinction is challenged.

Kant, in the Critique of Pure Reason, argues that judgements can be classified in two quite different ways. In the first place, we can classify judgements as either a priori or a posteriori. Judgements are said to be "a priori"

if they can be known to be true "independently of experience and even of all impressions of the senses"<sup>1</sup>; they are classified as a posteriori if their truth has its source in experience. Secondly, judgements are classified as synthetic or analytic. An affirmative analytic judgement is one in which "the predicate B belongs to the subject A as something which is (covertly) contained in the concept A"<sup>2</sup> whereas in an affirmative synthetic judgement the predicate B "lies outside the concept, although it does indeed stand in connection with it".<sup>3</sup> Analytic judgements, "as adding nothing through the predicate to the concept of the subject, but merely breaking it up into those constituent concepts that have all along been thought in it, although confusedly, can also be entitled explicative. [Synthetic judgements], on the other hand, add to the concept of the subject a predicate which has not been in any way thought in it, and which no analysis could possibly extract from it, and they may therefore be entitled ampliative."<sup>4</sup> Elsewhere Kant has said that "analytical judgements express nothing in the predicate but what has been already

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<sup>1</sup>Immanuel Kant, Critique of Pure Reason, trans. Norman Kemp Smith, p. 42.

<sup>2</sup>Ibid., p. 48.

<sup>3</sup>Ibid.

<sup>4</sup>Ibid.

actually thought in the concept of the subject."<sup>1</sup>

According to Kant, then, the judgement "Dogs are animals" would be analytic, for the predicate of this judgement is really contained in the concept of the subject: the concept of being an animal is one of the concepts which goes to make up our concept of being a dog and hence when we think of the subject, we are already implicitly thinking too of the predicate, "animals". But if I were to say "Dogs are brown" I would be making a synthetic judgement for, while the predicate, "brown" is related to the subject, dogs, it is not included in the concept of this subject. Similarly the judgement "Peaches are fruit" is an analytic judgement while "Peaches are delicious" is synthetic.

Now, while Kant was the first to classify judgements under the headings "analytic" and "synthetic", many philosophers before him had made closely related distinctions. Perhaps the earliest such philosopher was Aristotle. Aristotle, like Kant, would say that statements such as "Dogs are animals" and "Dogs are brown" are different in kind, although the words that Aristotle would use to describe this difference would be different from those used by Kant. According to Aristotle<sup>2</sup>,

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<sup>1</sup>Immanuel Kant, Prolegomena to Any Future Metaphysics in From Descartes to Kant, eds. T. V. Smith and Marjorie Grene, p. 793.

<sup>2</sup>Aristotle, Selections, ed. W. D. Ross, pp. 14-18.

in a judgement such as "Dogs are animals" the predicate, "animals", is part of the essence of the subject; it tells us something about the nature or "whatness" of the subject. On the other hand, Aristotle would say that a statement such as "Dogs are brown" is different for it does not predicate an essential property of the subject, but rather applies some other kind of property to it which, although applicable to the subject, is not part of the essence of the subject. That Aristotle's distinction between essential and non-essential predication is similar to Kant's distinction between analytic and synthetic judgements has been recognized by the critics of the synthetic-analytic distinction who would call the defenders of this distinction the younger Aristotalians.<sup>1</sup> However, it should not be forgotten that Aristotle's and Kant's views are different in one respect at least, for while Aristotle was classifying predicates, Kant was classifying judgements.

Aristotle's distinction, which was recognized and preserved throughout the Middle Ages, is still quite often used to-day. However, with the rise of modern philosophy other ways of classifying statements were suggested and so Aristotle's

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<sup>1</sup>Morton G. White, "The Analytic and the Synthetic: an Untenable Dualism," Semantics and the Philosophy of Language, ed. L. Linsky, p. 286.

distinction was no longer regarded as indispensable or basic.

Long before Kant distinguished between analytic and synthetic judgements a distinction between analytic and synthetic methods was recognized. That this distinction between analytic and synthetic methods is different from that which Kant wished to make has been pointed out by Kant himself in the Prolegomena. Kant there argues that

The analytical method, so far as it is opposed to the synthetical, is very different from that which constitutes the essence of analytical propositions: it signifies only that we start from what is sought, as if it were given, and ascend to the only condition under which it is possible. In this method we often use nothing but synthetical propositions, as in mathematical analysis, and it were better to term it the regressive method, in contradistinction to the synthetic or progressive.<sup>1</sup>

This distinction appears in the writings of Hobbes. An example of the analytical method which Hobbes gives is the following:

If any man propound to himself the conception of gold, he may, by resolving, come to the ideas of solid, visible, heavy, (that is, tending to the center of the earth, or downwards) and many other more universal than gold itself; and these he may resolve again, till he come to such things as are most universal. And in this manner, by resolving continually, we may come to know what those things are, whose causes being first known severally, and afterwards compounded, bring us to the knowledge of singular things. I conclude, therefore, that the method

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<sup>1</sup>Immanuel Kant, Prolegomena to Any Future Metaphysics in From Descartes to Kant, eds. T. V. Smith and Marjorie Grene, p. 802, note 6.

of attaining to the universal knowledge of things is purely analytical.<sup>1</sup>

Although Hobbes, unlike Kant, is here describing an analytical method rather than an analytical judgement, because this method which he is describing consists in resolving a concept into its more general constituents, it is similar to what one would have to do in order to make a Kantian analytical judgement.

A distinction which is often said to have anticipated the Kantian division of judgements into those which are synthetic and those which are analytic is Leibniz's distinction between necessary and contingent truths. Leibniz holds that necessary statements are those which can be demonstrated from a resolution of their terms, whose subject and predicate we can show to be identical and whose opposite is eternally impossible or contradictory. Contingent statements, on the other hand, are also true, but are ones whose denial is not self-contradictory. According to Leibniz, "in every true proposition.....the concept of the predicate is in some way contained in the concept of the subject"<sup>2</sup> but only God is able

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<sup>1</sup>Thomas Hobbes, English Works, ed. Sir William Molesworth, vol I, p. 69.

<sup>2</sup>Gottfried Wilhelm Leibniz, "Necessary and Contingent Truths", From Descartes to Kant, eds. T. V. Smith and Marjorie Grene, p. 346. My italics.

to understand how this is so.

Now Leibniz, like Kant, speaks of a predicate of a statement being contained in the subject and in this respect what he says about necessary and contingent truths resembles what Kant said of analytic and synthetic judgements. However, Leibniz's distinction is quite different from Kant's in at least two respects. In the first place, while for Kant only the predicate of analytic judgements is contained in the subject, Leibniz would say that this is true of all true judgements. Secondly, Kant characterizes analytic and synthetic judgements in such a way as to leave open the question whether or not all necessary judgements are analytic and in so doing to leave open the question whether the division of judgements into synthetic and analytic would result in classes of statements having the same extension as those classes resulting from Leibniz's division of statements into necessary and contingent. And since this question is left open it cannot be the case that Kant intends his distinction to be one between necessary and contingent statements. Thus, contrary to what is often thought, Kant's distinction is really quite different from that of Leibniz.

Hume distinguishes between statements which assert matters of fact, which are not discoverable by thought or reason alone and which have to do with what exists; and

statements which assert relations of ideas, which are discoverable by the operation of reason alone and which are independent of matters of fact. However, this distinction, too, is different from Kant's for, among other things, Hume, like Leibniz, characterized his distinction as being one between certain and merely possible statements. Furthermore, Hume's distinction is based on the subject matter of statements--on whether or not the statements are about the existence of something--whereas Kant's is based on the logical form of statements and on the relation between the subject and predicate terms.

Thus the synthetic-analytic distinction, while being a classification of statements based on certain logical and epistemological properties, is different in certain important respects from those classifications of Kant's predecessors, Aristotle, Hobbes, Leibniz, and Hume. And so, although the idea of classifying judgements was not an original contribution of Kant, the particular classification which he made does differ from those made before his time.

Apart from a few criticisms of Kant's distinction made by the idealist philosophers, the synthetic-analytic distinction is one which was accepted almost without question up until 1949. Curiously enough, however, many of the criticisms which are now being made of this distinction are very much like

those made by the idealists at the end of the nineteenth century and in the early part of the twentieth century.

One such philosopher was T. H. Green. Green advanced three criticisms of Kant's contention that, for example, "All bodies are extended" is an analytic judgement while "All bodies are heavy" is synthetic. Green held (1) that, to someone who is familiar with the term "body", both predicates, "heavy" and "extended", are included in what he understands by this term while to an uneducated man neither is. Thus it is not the case, according to Green, that a given statement either simply is or is not analytic, or that a given predicate either simply is or is not included in a given subject, for "such inclusion is relative to the individual's state of mind."<sup>1</sup> Furthermore, (2) for someone who thoroughly understands the subject term of a true statement, whatever the predicate may be, the statement will be for that person analytic, and so the distinction between true statements which are analytic and true statements which are synthetic will hold only in those cases where a person has an imperfect grasp of the meaning of the subject term. Green argued (3) that because "it is only relatively to us, as of growing intelligence, that the distinction between the simpler attribute as

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<sup>1</sup>T. H. Green, Works of Thomas Hill Green, ed. R. L. Nettleship, Vol. II, p. 61.

contained in, and the more complex as belonging to, a subject, can have any meaning<sup>1</sup> that the distinction between analytic and synthetic judgements is not a sharp one dividing statements which are different in kind but is rather only a distinction of degree.

A very similar point of view has been expressed by F.

H. Bradley. Bradley contends that

a judgement is not fixed as "synthetic" or "analytic": its character varies with the knowledge possessed by various persons and at different times. If the meaning of a word were confined to that attribute or group of attributes with which it set out, we could distinguish those judgements which assert within the whole one part of its contents from those which add an element from outside; and the distinction thus made would remain valid for ever. But in actual practice the meaning itself is enlarged by synthesis. What is added to-day is implied to-morrow. We may even say that a synthetic judgement so soon as it is made, is at once analytic.<sup>2</sup>

I am not going to comment on these criticisms now, for the modern versions of these objections will be discussed at some length further on. Here I wish merely to emphasize the fact that while, until very recently, Kant's distinction was accepted in almost all quarters, there nevertheless have been those in the past who have raised objections to it. And furthermore, many of the objections which are being raised

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<sup>1</sup>Ibid., p. 229.

<sup>2</sup>F. H. Bradley, The Principles of Logic, Vol. I., p. 185.

to-day are merely a re-echoing of those which were raised some time ago but which, perhaps because of the general revolt against idealism, were ignored.

As idealism went out of fashion in the early part of the twentieth century the new and radical logical positivist movement grew in strength. One of the basic tenets of this movement was the doctrine that only analytic statements could be known to be true with certainty and apart from experience. It was said that all synthetic statements, on the other hand, must be capable of verification, although the verification which would be possible would at best render these statements only highly probable. Thus to the adherents of this doctrine the synthetic-analytic distinction, which they accepted unhesitatingly, was basic.

Even after the strength of the logical positivist movement began to wane the synthetic-analytic distinction continued to go unchallenged. And as philosophical analysis developed and slowly came to dominate the philosophical scene of the English speaking world, an assumption which is basic to the synthetic-analytic distinction became explicit in the writings of the analysts. What is assumed both by those who would pronounce upon the analyticity of a statement and by those who would engage in analysis is that we can discover what the meaning of a word is, or that we can at least discover part of the meaning of a given expression. If it were not the case

that we could do this, then the goal of the analysts, which is to analyse the meaning of certain philosophically interesting and perplexing words, would be unattainable, and it would also be impossible to tell whether a given predicate was or was not contained in a given subject. It is this assumption which underlies the synthetic-analytic distinction that has been questioned by current critics of this distinction. As the arguments for and against the truth of this assumption are considered it should be remembered that on the truth of this assumption depend two things: (1) our ability to determine whether or not a given statement is analytic, and also (2) the very existence of that movement which has become known as "philosophical analysis".

It is sometimes suggested that, whatever be the theoretical correctness of the synthetic-analytic distinction, the distinction itself is really not of much practical importance. I should like to argue that this is not so. It has long been thought that, given a verbal definition of a certain word "W" (e.g., "Word 'W' means abc"), it is then possible to infer from this definition the statement "All W's are abc" which will be true and will be known to be true quite apart from any investigation or any information other than the stated definition. And the reason for this is that "All W's are abc" has been said to be an analytic statement which "follows from" the meaning of "W". Very often these allegedly

analytic statements are used as premises in arguments. For example, if the rightness or wrongness of smoking were in question someone might argue as follows: "(1) 'Wrong' means abc. (2) Thus all acts that are abc are wrong. (3) Smoking is abc. (4) Thus smoking is wrong." However, if it were not possible to claim that (2) was analytic then it would not be possible to infer (2) from (1) alone but only from (1) plus additional evidence. And the very fact that from statements such as (1) we infer statements such as (2) bears testimony to our acceptance of the synthetic-analytic distinction. If this distinction is not legitimate then our manner of arguing should be amended.

Although I think it is correct to say that we do not very frequently assert analytic statements such as (2), I do not think it follows from this fact that analytic statements do not play a major role in our thinking. Very often, I would suggest, analytic statements are the suppressed premises of the arguments and discussions which we engage in every day. The argument "A Plymouth is an unreliable car; An unreliable automobile is a bad investment; Thus a Plymouth is a bad investment" could not be said to be valid unless one supplies the suppressed analytic premise "An unreliable automobile is an unreliable car." I would thus suggest that quite a number of arguments would not be valid if analytic statements were ruled out and that consequently analytic statements play a much

larger role in our thinking than they might at first seem to do.

As W. H. Walsh has pointed out, when we say that a certain assertion which we have made is analytic we are indicating the boundaries of the concepts we are using. It is only in so far as one is prepared to say which of one's statements are analytic and which are synthetic that one has "a self-conscious grasp of the conceptual structure one was seeking to apply."<sup>1</sup> Such a classification of statements, however, cannot validly be made if the synthetic-analytic distinction is illegitimate.

Thus the distinction between synthetic and analytic statements, which is based on an assumption that is common to the analytic movement, plays a part in the way we think and argue and aids us in clarifying to ourselves and to others the limits of the concepts or words which we use. And each of these things is endangered by the current criticisms of the synthetic-analytic distinction.

These criticisms of the synthetic-analytic distinction have taken a variety of forms and have been put forward by men who hold quite different views regarding other areas of

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<sup>1</sup>W. H. Walsh, "Analytic/Synthetic," Proceedings of the Aristotelian Society, LIV (1953-1954), p. 90.

philosophy. In spite of this variety, however, these criticisms seem to me to be basically of two distinct types. On the one hand, much criticism has been directed against definitions of the word "analytic". Orthodox accounts of the meaning of this term have been questioned, while the problems involved in defining "analytic" have been discussed at considerable length. On the other hand, there has been considerable disagreement over what kinds of statements are analytic and over the method for deciding whether any given statement is analytic or synthetic. The long-accepted methods for deciding such questions have been rejected while new methods, put forth as a result of the recent criticism, have been found to be no more satisfactory than the old ones they were intended to replace. In commenting on the difficulties involved in the synthetic-analytic distinction Benson Mates points out that

using Frege's terminology, we may say that people who cannot understand "analytic" may have difficulty with respect either to its reference or to its sense, or with respect to both. Some talk as though they grasped its sense but found its reference empty, i.e., as though they understood the meaning of "analytic" but were doubtful about the existence of any such thing as an analytic sentence..... On the other hand there are objectors who have difficulty with the sense of "analytic", even though they may be as competent as anyone to decide whether or not a given sentence is within the reference of the term. In these cases the competency has perhaps been acquired somewhat in the manner in which a sightless person can learn the correct and appropriate use of language referring to visual phenomena.<sup>1</sup>

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<sup>1</sup>Benson Mates, "Analytic Sentences," Philosophical Review, XI (1951), pp. 527-528.

Thus the intension as well as the extension of the term "analytic" has been questioned while the traditional accounts of the intension and extension of this term have been criticized.

I do not wish to suggest that critics of the synthetic-analytic distinction have always recognized that their questions fall into these two distinct groups. This has not been so. Too often we find a philosopher saying in one and the same article both that he does not understand the meaning of the term "analytic" and that he does not accept certain criteria of analyticity, yet we do not find any indication that he distinguishes between these two quite distinct problems. Consequently, although I believe these two problems to be distinct, the separation of those remarks of a philosopher which pertain to one of these problems from those which pertain to the other has in some cases had to be rather arbitrary.

It might be wondered why the meaning of "analytic" is a problem at all, in view of the fairly unambiguous characterization which Kant gave of this term. While such a question is understandable, it should also be pointed out that since Kant's time the term "analytic" has been applied to many statements which differ in some important respects from those which Kant said were analytic. For example, the statements "If this is a horse then this is an animal" and "If seven is greater than four then four is less than seven" have been said

to be analytic, yet they are not of subject-predicate form like those which Kant cited as examples of analytic judgements. And while what Kant says about analytic judgements seems fairly clear when we consider only judgements of subject-predicate form, it is not clear how his remarks apply to statements such as those above which are not of that form. Because this is the case it seems at least possible, and perhaps even likely, that the meaning of "analytic" has changed or become extended since Kant's time so as to be applicable to these additional types of statements. When the question of the intension of "analytic" is raised, it is the present meaning of this term, rather than the meaning it had in Kant's time, that is being requested.

The word "synthetic" is of course just as much in need of definition as the word "analytic". If we could define "analytic", however, then, since these words function as logical contradictories, we could define "synthetic" as meaning non-analytic. Thus while the word "synthetic" is indeed in need of being defined, the question of its meaning does not constitute a third problem for defenders of the synthetic-analytic distinction.

While the two main questions which will be discussed in this thesis are those of the intension and extension of the term "analytic", there are at least two aspects of these questions which will not be dealt with in order that the more

important issues may be discussed more fully.

Although it would be generally agreed that both statements in natural languages, such as English, Dutch or French, and statements in artificial languages of the logician's creation are allegedly analytic, I shall consider only the problems which are related to analyticity in a natural language. This decision will still allow us to consider the major issues which have been raised regarding the synthetic-analytic distinction but it will at the same time allow us to ignore many technical details peculiarly associated with formal logical systems.

Secondly, while the extension of "analytic" and the suggested criteria of analyticity will be discussed in some detail, I do not intend to review the debate over whether certain specific statements, such as "What is green is extended" or " $2^{10} = 1024$ ", are analytic, even though the question of their analyticity has been a matter of much current concern. Here again I feel that a thorough discussion of whether or not specific statements are analytic would not be possible within the limits of this thesis unless other more fundamental questions were omitted. Furthermore, such questions, while no doubt important, are really independent of the validity or invalidity of the synthetic-analytic distinction. And it is the validity of this distinction which is the primary subject for discussion here.

With these qualifications, then, the two questions, "What is the intension of 'analytic'?" and "What is the extension of 'analytic'?" will be considered. I should like to begin first by considering the intension of this term.

## CHAPTER II

### THE INTENSION OF "ANALYTIC"

As indicated in the last chapter, I propose to deal with only two of the major problems involved in the synthetic-analytic distinction. The first problem is to give an account of the meaning, in the sense of the intension<sup>1</sup>, of the term "analytic" (and so by implication of the term "synthetic"); the second, to specify the extension of the term. Traditional accounts of the intension of "analytic" have recently been questioned; while bolder critics have even suggested that its extension is null. In the present chapter, I shall summarize recent debate over the intension of the term.

Perhaps the best known and certainly the oldest account of the intension of "analytic" in the sense relevant to our discussion is that given us by Kant. Kant writes:

In all judgements in which the relation of a subject to the predicate is thought....this relation is possible in two different ways. Either the predicate B belongs to the subject A, as something which is (covertly) contained in this concept A; or B lies outside the concept A, although it does indeed stand in connection with it. In the one case I entitle the judgement analytic, in the other synthetic. Analytic judgements (affirmative) are therefore those in which the connection of the predicate with the subject is thought through identity; those in which this connection is thought

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<sup>1</sup>By the "intension" of a term I mean what is strictly included in the definition of that term, i.e., what would be the definiens of the term.

without identity should be entitled synthetic. The former, as adding nothing through the predicate to the concept of the subject, but merely breaking it up into those constituent concepts that have all along been thought in it, although confusedly, can also be entitled explicative. The latter, on the other hand, add to the concept of the subject a predicate which has not been in any wise thought in it, and which no analysis could possibly extract from it; and they may therefore be entitled ampliative.<sup>1</sup>

Thus, to use Kant's example, to say that "'All bodies are extended' is analytic" is to say that "The predicate 'extended' is contained in the concept of the subject 'bodies'"; whereas the judgement "All bodies are heavy" is not analytic, for the predicate "heavy" is not contained in the concept of the subject, "bodies".

Now, while Kant's account of analyticity has been generally accepted, several objections have been repeatedly raised against it. It has been pointed out by philosophers such as Ayer, Waismann, and Quine that Kant's definition of "analytic" is such that the word "analytic" (and I suppose also the word "synthetic") is applicable only to statements of subject-predicate form. They then point out that the word "analytic" is to-day meaningfully applied to many types of statements which are not reducible to statements of subject-predicate form and thus it cannot be the case that we now mean by "analytic" what Kant meant by it. For example, it would

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<sup>1</sup>Immanuel Kant, Critique of Pure Reason, trans. Norman Kemp Smith, p. 48. My italics.

be generally agreed that the statement "If John is older than Mary then Mary is younger than John" can be meaningfully said to be analytic. But we cannot meaningfully say that the predicate of this statement is contained in the concept of the subject of the statement. Thus when we say that this statement is analytic we must mean something different by "analytic" from what Kant meant by this word. It is because Kant's definition does not cover all statements that are commonly said to be analytic that it has been rejected.

It is also argued that even if we consider only statements of subject-predicate form, Kant's definition is still not plausible. It has been urged that to define "analytic" in terms of concepts is unsatisfactory, for "concept" is itself obscure and in need of definition. Most attempts to define or explain the meaning of "concept" have involved reference to such vague and subjective things as images or ideas and consequently shed little light on the meaning of the word "concept". Also, what is meant when one speaks of a predicate as contained in the concept of the subject? Quine objects<sup>1</sup> that this is a metaphorical notion which Kant has not explained in non-metaphorical terms; while Waismann notes that "contained in" is ambiguous as well as metaphorical. Thus

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<sup>1</sup>W. V. Quine, From a Logical Point of View, p. 21.

Waismann contends that "Kant, when he speaks of 'analytic', is unwittingly using nothing but metaphorical terms, which hint at, and at the same time obscure, what the true relation is."<sup>1</sup>

Kant's definition of "analytic", then, is unsatisfactory on two quite different counts: first, it does not account for what we could possibly mean when we say that a statement which is not of subject-predicate form is analytic, and secondly, the terms in which "analytic" is defined are obscure and metaphorical. If either of these objections is valid then it must be the case that we do not mean by "analytic" what Kant meant by it.

According to Wild and Cobitz, C. I. Lewis has defined "analytic" in a way very similar to Kant's. Lewis is reported to have said that a proposition of the form "All A is B" is analytic when "the concept A includes or implies the concept B".<sup>2</sup> To this definition Wild and Cobitz raise an objection very similar to that raised against Kant's by Quine. "What", they ask, "does it mean to say that a certain concept

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<sup>1</sup>Friedrich Waismann, "Analytic/Synthetic," (part I), Analysis, X (1949-1950), p. 27.

<sup>2</sup>C. I. Lewis, Mind and the World Order, p. 316. I am not sure that Lewis really intends this as a definition of "analytic" but this, at any rate, is what Wild and Cobitz have taken him to have said.

is included in another?"<sup>1</sup> Noting that "inclusion" usually has a spatial connotation, they suggest that perhaps this explains why those who use the term try to elucidate its meaning by means of a spatial metaphor. For example, we are sometimes told that when a concept A includes a concept B then concept A is "logically wider" than concept B. But this does not remove the puzzle. As they observe, the proposition "Red is a colour" is usually said to be analytic. Yet the subject of this proposition does not seem to be logically wider than the predicate. If by "inclusion" is not meant this unsatisfactory spatial metaphor then, Wild and Cobitz conclude, "we must ask those who use this term what they mean exactly by inclusion."<sup>2</sup>

Since the definitions of "analytic" considered above do not seem satisfactory the question again arises: "What do we mean by 'analytic'?" According to Quine<sup>3</sup>, analytic statements are sometimes defined as those which are true in all possible worlds, or, less picturesquely, as those which could not possibly be false. Now Quine does not inform us who defines "analytic" in this way; but whether or not such a definition is ever actually put forth, it is plain that it is untenable. In recent years there has been much debate

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<sup>1</sup>John Wild and J. L. Cobitz, "On the Distinction Between the Analytic and the Synthetic," Philosophy and Phenomenological Research, VIII (1947-1948), p. 653.

<sup>2</sup>Ibid.

<sup>3</sup>Quine, op. cit., p. 20.

over the existence of non-analytic (i.e., synthetic) statements which could not possibly be false; some prominent philosophers maintain that there are such statements while many others argue that there are not. If, however, "analytic" means the same as "could not possibly be false", then this debate would be an absurdity; it would reduce to a debate over the question whether there exist non-analytic statements that are analytic. The suggestion, then, that "analytic" means the same as "could not possibly be false" must also be rejected.

Some writers suggest that "analytic statement" may be defined as a statement which is true in virtue of the meanings or definitions of its words. Now, while this definition is perhaps more satisfactory than those previously suggested, it nevertheless should not be accepted. If those who suggest this definition really mean that it is just the definitions of certain words which account for the analyticity of a statement, then what they are saying is not true. Meanings of words alone do not render a statement analytic; the words having these meanings must be combined in a particular way. It is not just the meaning of "bachelor" which renders the statement "All bachelors are men" analytic; the statement "All men are bachelors" contains the same words but is clearly synthetic. If, on the other hand, this suggested definition of "analytic" is interpreted as a suggestion that an analytic statement is one which is true because of what its words mean and because

of the way its words are combined, it would still not seem to be satisfactory for it might be claimed that certain statements (e.g., "What is green is extended") are both non-analytic and are true because of what their words mean and because of the way their words are arranged. On either interpretation of this suggestion, then, it does not seem to be acceptable.

Another definition of "analytic" has been given by Morris Weitz. "To say that the statement 'No bachelor is married' is analytic", Weitz suggests, "is to say primarily that this statement is an inference pattern of an actual conceptual system".<sup>1</sup> As I understand him, Weitz believes that the concepts, being single, being male, being a bachelor, etc., have become in our society so related that they form a complex conceptual system consisting in part in a series of inference patterns "such that if we are given a statement about one of the concepts in the system, we can validly infer certain other statements about other concepts."<sup>2</sup> Thus it is the actual conceptual system in our society that validates the inference from the statement "John is a bachelor" to the statement "John is a male". To say that "'If John is a bachelor then John is a male' is analytic" is to say that

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<sup>1</sup>Morris Weitz, "Analytic Statements," Mind, XLIII (1954), p. 492.

<sup>2</sup>Ibid., p. 491.

this statement is an inference pattern of an actual conceptual system. On the other hand, however, the statement "Bachelors are without funds" is synthetic; for, since being without funds is not conceptually related to being a bachelor, we cannot learn the truth of this statement by learning a bit of the conceptual system of our society but rather by learning something about the world.

It seems to me that some of the objections raised against other definitions of "analytic" would apply with equal force to Weitz's definition. Kant's definition has been objected to on the grounds that the word "concept" is obscure and the words "contained in" are metaphorical; Weitz's definition also involves the word "concept" while the meaning of his phrase "part of a conceptual system" might be queried in much the same way that Kant's phrase "contained in" was queried. What does it mean to say that "it is part of our conceptual system" that "being a bachelor" entails "being a male"? Does it mean that being male is part of the meaning of "bachelor"? And if this is so, is Weitz then saying that analytic statements are those which follow from the meanings of their words? If he is saying this, then his definition can be objected to on the ground that it does not distinguish analytic statements from allegedly non-analytic statements like "What is coloured is extended", which may also be said to follow from the meanings of their words.

If this is not what Weitz is saying, what is his meaning? Since this question is not in fact answered in Weitz's article we cannot consider the problem of the meaning of "analytic" solved.

Sometimes we are told that an analytic statement is one which cannot be denied without self-contradiction. Of this suggestion, Quine remarks that it is hardly helpful. "For the notion of self-contradictoriness, in the quite broad sense needed for this definition of analyticity, stands in exactly the same need of clarification as does the notion of analyticity itself."<sup>1</sup> What Quine perhaps has in mind, in raising this objection, is that any satisfactory definition of a word must be such that (1) the definiens be a more familiar and better understood term than the definiendum, and (2) that the definiens have the same meaning as the definiendum. Since the proposed definition does not meet condition (1) Quine accordingly objects to it; if Quine's objection is accepted then it would seem that this supposed definition of "analytic" must also be turned down.

It would seem then, that for one reason or another, the standard answers to the question "What does 'analytic' mean?" are all unsatisfactory. This situation might lead

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<sup>1</sup>Quine, loc. cit.

one to suggest that before going on to attempt to formulate a definition of "analytic" we should perhaps first decide just what conditions an adequate definition of "analytic" must satisfy.

Some of these conditions can be discovered by recalling the grounds on which proffered definitions of "analytic" have been rejected. One of the reasons for the rejection of Kant's definition of "analytic" was that it did not meaningfully cover all the statements which are commonly said to be analytic but rather covered only some of these (i.e., those of subject-predicate form). From this it would seem to follow that a satisfactory definition of "analytic" must (1) be such that it covers all statements that are commonly said to be analytic. Kant's definition was rejected because it was too narrow. Other definitions have gone to the other extreme; they have been too broad. We have seen that "analytic" cannot be said to mean the same as "could not possibly be false" because it is commonly said that some synthetic statements could not possibly be false. From this we may infer that (2) a satisfactory definition of "analytic" must be such that its definiens is not a characteristic or group of characteristics which non-analytic (i.e., synthetic) statements have been meaningfully claimed to have. Definitions of "analytic" have also been rejected because "analytic" was defined in metaphorical or obscure terms. This suggests another

condition which a satisfactory definition of "analytic" must meet, namely, (3) it must be such that its definiens be stated in precise and non-metaphorical terms.

These three conditions which an acceptable definition must meet suggest other and more specific conditions which must also be satisfied by a definition of "analytic". We have seen that a satisfactory definition must not have as its definiens a characteristic or group of characteristics which synthetic statements can be meaningfully said to have. Now, since the claim that there are synthetic statements which are necessarily true, and the claim that there are not, are both meaningful, any satisfactory definition of "analytic" must be such as not to deprive either claim of meaningfulness. In other words, "analytic" must be defined in such a way that it leaves open the question whether or not there are necessary non-analytic statements.

Similarly, since the claim that there are synthetic statements which are a priori, and the claim that there are not, are both meaningful, any satisfactory definition of "analytic" must be such as not to deprive either of these claims of meaningfulness. Thus "analytic" must be defined in such a way that it also leaves open the question whether or not there are synthetic a priori statements. From this it follows that the synthetic/analytic dichotomy is not intensionally equivalent to either the necessary/contingent

dichotomy or the a priori/a posteriori dichotomy, although of course extensions of the corresponding members of these three pairs of terms may be identical.

I have argued that a satisfactory definition of "analytic" must be such that when the definiens of such a definition is substituted for "analytic" in any typical statement of the form "Statement 'S' is analytic" the resulting statement will still be meaningful. Someone might say, however, that this condition would only be necessary if it were the case that "analytic" is not used ambiguously. If it were the case that "analytic" was ambiguous then of course no one definition could be given for it, and no one phrase could be substituted for "analytic" in all statements of the form "Statement 'S' is analytic". Thus, before resuming our search for a definition of "analytic", we should perhaps first consider whether or not "analytic" is ambiguous. I should like now to argue that there are at least two ways in which a word may be ambiguous; I shall then go on to argue that "analytic" is ambiguous in one of these ways but not in the other.

In the first place, a word may be ambiguous if it is used by different people in different senses even though each individual who uses the word may always use it in the same sense. "Sensation", "idea", and "Christian" are good examples of words which are ambiguous in this way, since

there is considerable divergence between the meanings different people attach to each of these words. If a word is ambiguous in this way then misunderstanding usually prevails when those who use the word in different senses enter into conversation with one another.

But even words which are free from this kind of ambiguity may nevertheless be ambiguous, for while they may not be used by different people in senses peculiar to an individual or group of individuals, they may be used by everyone in different senses in different contexts. An example of a word which is ambiguous in this way is the word "fair"; in some contexts it means blonde, in some contexts it means just, and in other contexts it means an exhibition or midway. If a word is ambiguous in this way, however, it is not likely to cause misunderstanding since in most cases we can quite easily tell from the context just in what sense the word is being used.

Nevertheless, if the word "analytic" is ambiguous in either of the two ways I have discussed then the question "What is the meaning of 'analytic'?" is incomplete and imprecise for, given the kind of ambiguity discussed first it should be reworded so that analyticity for a speaker is specified (e.g. "What is the meaning of 'analytic' for person P?") while if it is ambiguous in the second way then the question should be reformulated to read "What is the meaning of 'analytic'

in context C?"

First let us consider whether "analytic" is ambiguous in the sense described first, i.e., whether its meaning varies from person to person. So far in the discussion it has been assumed that "analytic" is not ambiguous in this way, but this assumption, of course, is one which might be questioned. I do not know how to prove that this assumption is correct but I shall argue that there is no good reason for believing it to be false. It seems to me that since we are able to converse with one another then at least a great number of the symbols we use must have the same meaning for those who use them. If I want to get people to believe something, even, for example, that "analytic" means something different for person X from what it means for person Y, one of the things I may do is make certain assertions which I consider to be relevant to my thesis and which, I hope, will convince others of its truth. I could not in this way convince anyone of the truth of anything, however, if it were not the case that the words I used in my assertions have the same meaning for the people I addressed and for myself, for otherwise the people I was speaking to would not understand what I was trying to say to them. Since we can and do use words to convince others of the truth of our beliefs it must be the case that a great number of the words we use have the same meaning for all, or nearly all, who use them. It is of course still

possible that the word "analytic" is a peculiar word in that it, like the word "sensation" but unlike most other words, is used by different people in different senses. But no reason has been given for believing that "analytic" is in this respect different from most other words and until such reasons are forthcoming I do not see why one is not justified in assuming that "analytic", like most other words, has the same meaning for all those who use it. And if this is so it is then quite correct to ask "What is the meaning of 'analytic'?" without adding any qualifications in terms of meaning for a particular person.

It might still be the case, however, that "analytic" suffers from the second type of ambiguity I have discussed; and hence that we should accordingly amend our original question to read: "What is the meaning of 'analytic' in context C?" But how should one go about deciding whether "analytic" is ambiguous in this way? To show that the word "fair" is used ambiguously we show that sometimes it refers to things which are thought to have certain characteristics, say a, b and c, such that if these things were thought to lack one of these characteristics they would not be referred to by "fair", while at other times it refers to things which are thought to have a quite different set of characteristics, say d, e and f, but which are not necessarily believed to have a, b or c. When this situation arises we say that "fair"

is used ambiguously, that sometimes its meaning is related to a, b and c and at other times to d, e and f; what meaning it has at any given time we say can be gathered from the context. While this is only a rough characterization of how we go about showing that "fair" is ambiguous, perhaps it will work for "analytic". I submit that "analytic" is definitely ambiguous in one respect at least, for "analytic" is sometimes used in such a way that the statement it is applied to must, among other things, be believed to be true or else it would not be said to be analytic, while occasionally it is also used in a second way such that whether the statement it is applied to is believed to be true or false is not relevant, and consequently the statement may be shown to be false without its being shown not to be analytic. In the first case "analytic" is used in such a way that from the truth of the statement "Statement 'S' is analytic" it may be inferred that statement "S" is true. For example, when one says "If ' $2+2=4$ ' is analytic then two plus two must equal four" one is here using "analytic" in this sense. But in the second case "analytic" is used in such a way that one can say without contradiction that a statement (such as "No men are men") is analytically false. In virtue of the fact that "analytic" can be and is used in these two ways it may be concluded that "analytic" is ambiguous. For the sake of convenience, when "analytic" is used in the first sense let us say that it is

being used in a strong sense, and when in the second, let us say that it is being used in a weak sense. We can now ask "What is the meaning of 'analytic' (in the strong sense)?" and also "What is the meaning of 'analytic' (in the weak sense)?" And we shall be asking two quite different questions.

Thus it can be seen that the question we originally started with, "What is the meaning of 'analytic'?", is ambiguous and can be rendered more precise by specifying just what sense of "analytic" it is the meaning of which is being requested. From the nature of the definitions of "analytic" which we have considered I think it highly probable that "analytic" was being used in the strong sense. For example, the suggestion that "analytic" means the same as "true in virtue of the meanings of its words" could only be made if "analytic" was being used in this sense; for the same reason it may be concluded that those who think "analytic" means the same as "could not possibly be false" must be using "analytic" in its strong sense. As for Weitz's definition of analytic statements as those which are validly inferable from the nature of the concepts of our society, since Weitz surely does not believe that we can validly infer a false statement from the concepts of our society, it is probable that he too is using "analytic" in its strong sense. From these considerations I would conclude that it is the meaning of "analytic" in the strong rather than weak sense that has been the subject

of philosophical debate. If this is the case then our original question, "What is the meaning of 'analytic'?", can be rendered more precise by being changed to read, "What is the meaning of the strong sense of 'analytic'?"

The request for the meaning of "analytic" in the weak sense would constitute an additional problem for philosophers. In the discussion which follows, however, the meaning of the strong rather than the weak sense of "analytic" will be taken to be the main problem. If the meaning of the strong sense of "analytic" can be satisfactorily explicated then it may be the case that, given this explication, the problem of the meaning of the weak sense of "analytic" can also be solved; for it may be the case that a simple modification of the definition of "analytic" in the strong sense will give us an adequate definition of the weak sense of "analytic". For the time being, however, only the meaning of "analytic" in the strong sense will be considered.

Since the problem being dealt with amounts to a demand for the meaning of "analytic" in its strong rather than weak sense then it will not be the case that the definiens of this sense of "analytic" must be such that it can be substituted for "analytic" in any statement of the form "Statement 'S' is analytic" but only in those statements which are of this form and in which "analytic" is being used in its strong sense. But how can we distinguish those statements

of the form "Statement 'S' is analytic (in the strong sense of 'analytic')" from those of the form "Statement 'S' is analytic (in the weak sense of 'analytic')" prior to knowing explicitly the meaning of either sense of "analytic"? However, since we know that at least one of the ways in which the strong and weak senses of "analytic" differ is that from the truth of a statement of the form "Statement 'S' is analytic (in the strong sense of 'analytic')" it can be inferred that "S" is true, while from the truth of a statement of the form "Statement 'S' is analytic (in the weak sense of 'analytic')" it cannot be inferred that "S" is true, we can then infer in what sense "analytic" is being used in statements of the form "Statement 'S' is analytic" by applying the following rule: "analytic" is being used in the strong sense if, and only if, from the truth of a statement of the form "Statement 'S' is analytic", it can be inferred that "S" is true. To discover the types of statements which are typically said to be analytic (in the strong sense of "analytic") we only need discover what kind of statements are (1) meaningfully and typically claimed to be analytic, and which are also (2) claimed to be true as a consequence of their being analytic. This is of course an empirical question and so a final answer to it could only be given after an exhaustive consideration of the conventional usage of "analytic". I would suggest, however, that the following statements are representative of the

types of statements which would satisfy conditions (1) and (2): "All bachelors are bachelors", "All bachelors are men", "If anyone is a bachelor then he is a bachelor", "If anyone is a bachelor then he is a man", "If John is older than Mary then Mary is younger than John", "Two plus two equals four" and "Either nine is greater than seven or nine is not greater than seven". What is desired then is a definition of the strong sense of "analytic" which is expressed in clear and non-metaphorical language, which is such that its definiens can be meaningfully applied to all statements (such as the ones above) which satisfy conditions (1) and (2), and which is such that its definiens is not applied to any statements which do not satisfy conditions (1) and (2).

Strangely enough, such a definition has been given to us by the very men who are the strongest critics of the synthetic-analytic distinction. After objecting to many definitions of "analytic", Friedrich Waismann concludes: "We shall have to say 'A statement is analytic if it can, by means of mere definitions, be turned into a truth of logic', i.e., if it is transformable into such a truth."<sup>1</sup> While Waismann does not express his definition linguistically his characterization of analytic statements quoted above must be intended as a definition of "analytic" since it was offered after a lengthy

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<sup>1</sup>Waismann, op. cit., p. 31.

discussion of other definitions and as a modification of one of them. If phrased linguistically, Waismann's statement would read: "Statement 'S' is analytic" means statement "S" can be turned into a truth of logic by means of definitions.

Thus Waismann maintains that if "planet" is defined as a heavenly body that moves around the sun then "All planets move around the sun" is analytic for, by replacing "planet" by its definiens we get "All heavenly bodies that move around the sun move around the sun", which can eventually be reduced to "Whatever a thing may be, it has the following property: if it is a heavenly body that moves around the sun, then it moves around the sun"<sup>1</sup>; and the structure of this latter statement can in turn "be seen to coincide with a quite definite formula in PM, namely with

$$(x): \phi x \cdot \psi x \supset \psi x$$

From this example it sounds as if Waismann is saying that "All planets move around the sun" is analytic because it can be reduced to a formula found in a logic book. This would only be so, however, if it were the case that all the formulae in logic books are themselves truths of logic. I would not wish to deny that this is so but, granting it to be so, it is nevertheless only a contingent matter of fact, for someone

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<sup>1</sup>Ibid., p. 32.

<sup>2</sup>Ibid., p. 33.

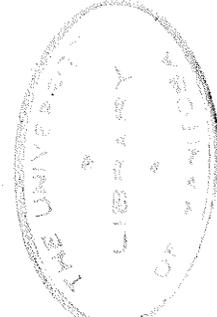


might very well write a logic book that contained formulae which are not logical truths (e.g.,  $P \supset P: \supset : \neg P$ ). Thus it is not because "All planets move around the sun" is reducible to a formula occurring in Principia Mathematica that it is correct to say that it is analytic, but rather because it can be turned into a logical truth. Furthermore, since this is the case and because someone must have said at some time in the past that "A is A" is a logical truth before it was written in any logic book and also because it is not self-contradictory to say that there are logical truths still to be discovered, it cannot be the case that the meaning of "logical truth" is related to what is contained in logic books.

This raises the question of what we mean by "logical truth". It has been pointed out before that a satisfactory definition of "analytic" must be such that the terms in which it is defined be clear and non-metaphorical. Thus if Waismann's definition of "analytic" is to be defended "logical truth" must be defined in an unambiguous manner. For an answer to the question of the meaning of "logical truth", I think we may best go to Quine. Quine defines a "logical truth" as "a statement which is true and remains true under all re-interpretations of its components other than logical particles."<sup>1</sup>

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<sup>1</sup>Quine, op. cit., p. 22.



Quine thus cites<sup>1</sup> "No A not B is B" as an example of a logical truth since, regardless of what we take "A" or "B" to stand for, the resulting interpretation of this statement will be true; "All A is B", on the other hand, is not a logical truth, for if we substitute "men" for "A" and "music-lovers" for "B" the resulting statement would be false. Quine thus seems to have defined "logical truth" in a clear and straightforward manner.

A second term in Waismann's definition which should be defined is the word "definition" itself, for this word can be used in various senses. "Definition", as it occurs in the definition of "analytic", must be used to mean a reportive definition consisting of definiendum and definiens, the definiendum being the word to be defined (enclosed in quotation marks) and the definiens specifying the nature of what the definiendum denotes, for only if "definition" were used in this sense would it be possible to transform any statement by means of definitions, which is what we are claiming can be done when we say of a statement such as "All bachelors are men" that it is analytic. That this is what "definition" here means seems almost too obvious to need mentioning, but in view of the fact that the analytic-synthetic distinction has been attacked (as we shall later see) on the ground that

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<sup>1</sup>W. V. Quine, "Notes on Existence and Necessity," Semantics and the Philosophy of Language, ed. L. Linsky, p. 84.

"definition", as it occurs in the definition of "analytic", is ambiguous, it is here necessary to make clear just in what sense "definition" is being used.

The only other words in Waismann's definition of "analytic" that are likely to be said to be ambiguous are the words "turned into". This difficulty can, I think, best be met by amending Waismann's definition slightly so as to get rid of the offending phrase. We might do this by rewording it as follows: "analytic" (i.e., the strong sense of "analytic") means reducible to a logical truth by means of definitions. Given this definition of "analytic", and also given the definitions of "logical truth" and "definition" which have been stated above, I submit that we have now defined "analytic" in a clear and unambiguous manner.

This definition of "analytic" also meets those difficulties which were raised against the other suggested definitions that were considered earlier. It covers statements not of subject-predicate form which are meaningfully said to be analytic, for there are logical truths which are not of subject-predicate form (e.g., "If P then P"). It also leaves open the question whether or not there are synthetically necessary and synthetic a priori statements, for in saying that a statement is reducible to a logical truth one is not saying anything about whether it is necessary or a priori. Thus it seems to meet those conditions laid down earlier for a satisfactory definition of "analytic".

This definition of "analytic" is roughly equivalent to that given by Quine and accepted<sup>1</sup> by Morton G. White. Quine submits that "we can define an analytic statement as any statement which, by putting synonyms for synonyms, is convertible into an instance of a logical form all of whose instances are true."<sup>2</sup>

One further modification of the definition of "analytic" seems to me to be advisable. Since it is meaningful to speak of a logical truth itself as being analytic, I would suggest that the definition of "analytic" be amended to read as follows: "analytic statement" means the same as "a statement which is a logical truth or one which is reducible to a logical truth by means of definitions". Given this definition of "analytic statement", the statement "Logical truths are analytic" would then not only be true but would also itself be analytic; it would be reducible to the statement "Logical truths are logical truths or are reducible to logical truths by means of definitions"; and this statement would be an instance of the logical form "All A is A or B" all of whose instances are true.

Quine's formulation of the meaning of "analytic" gives us a clue for defining the weak sense of "analytic". It has

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<sup>1</sup>White, op. cit., p. 275.

<sup>2</sup>Quine, loc. cit.

been said that the strong and weak senses of "analytic" differ in that while from the truth of a statement of the form "Statement 'S' is analytic (in the strong sense of 'analytic')" it can be inferred that "S" is true, from the truth of a statement of the form "Statement 'S' is analytic (in the weak sense of 'analytic')" it cannot be inferred that "S" is either true or false. Since there are logical forms such as " $P \cdot P$ " all of whose instances are false, as well as logical forms all of whose instances are true, perhaps it is the case that a statement which is analytic in the strong sense differs from one that is analytic in the weak sense in that while the former is, or is reducible to, a logical form all of whose instances are true, the latter is, or is reducible to, a logical form all of whose instances are false, or is, or is reducible to, a logical form all of whose instances are true. This definition would leave open the question whether or not a statement which is analytic in the weak sense is true and would thus preserve the difference which has been noted between statements which are analytic in the strong sense of "analytic" and those which are analytic in the weak sense of "analytic".

In any case, the problem of the meaning or intension of "analytic", in the strong sense of this term, which has been the subject of much recent philosophical controversy, has been tentatively resolved. The second problem related to the synthetic-analytic distinction--that of the extension of "analytic"--may now be considered.

### CHAPTER III

#### THE EXTENSION OF "ANALYTIC": ARE THERE ANY ANALYTIC STATEMENTS?

On the question of the extension of the term "analytic"<sup>1</sup> philosophical opinion is greatly divided. When allegedly analytic statements are considered it is generally agreed that they fall into two groups. On the one hand there are statements like: "If John is a man then John is a man"; or "All bachelors are bachelors"; which, without definitions being given of any of the words which occur in the statements, can be shown to be instances of logical truths such as: "If P then P" or "All A is A". Statements of this type repeat in one part of the statement a word or group of words which occur in another part; and for this reason they have been called repetitive statements. On the other hand, there are statements like: "If John is a man then John is an animal"; or "All bachelors are unmarried"; which allegedly can be reduced to statements of the first class by putting synonyms for synonyms in the original statement. Statements of this class have been called non-repetitive statements. Now nearly all philosophers agree that statements of the first class are analytic; there is much disagreement, however, regarding the class of non-repetitive allegedly analytic statements.

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<sup>1</sup>From here on "analytic" will be used in the strong sense.

This disagreement has more than one dimension. In the first place there is disagreement over the very existence of non-repetitive analytic statements. One philosopher has gone so far as to say that the term "analytic" is meaningful but does not apply to any non-repetitive statement; while over a dozen philosophers have responded to this claim by arguing that there really are non-repetitive statements that are analytic. Secondly, there is disagreement over the methods to be employed in finding out whether any given non-repetitive statement is analytic. Much criticism has been directed against the traditional methods of deciding whether or not a non-repetitive statement is analytic; and the challenge has been laid down for philosophers either to come forward with a workable criterion or else to cease talking as if a clear-cut criterion existed. In this chapter the main arguments pertaining to the first of these issues will be discussed; in the following two chapters I shall review the debate over criteria for testing the analyticity of non-repetitive statements.

Nelson Goodman has argued, and Benson Mates has been taken to have argued, that there are no non-repetitive analytic statements. First I shall discuss Goodman's position. In support of his thesis, Goodman takes the still more unorthodox stand that no two different words ever have the same meaning.

In the six years since these curious views were first expressed, at least fifteen articles have been published in the philosophical journals either in defense of or in opposition to Goodman's thesis. While I shall not fully describe all of these articles I shall, in what follows, try to make clear Goodman's position and review the debate which it has aroused. Since Goodman's denial of the existence of non-repetitive analytic statements is based on his denial of the relation of sameness of meaning between different words I shall accordingly first outline his argument for this latter thesis.

Goodman begins by raising the question: "Under what circumstances do two names or predicates in an ordinary language have the same meaning?"<sup>1</sup> After rejecting several possible answers to this question Goodman considers the possibility that two terms differ in meaning if and only if they differ in extension. Of this thesis he says that "obviously, if two terms have the same meaning they have the same extension; the trouble is that two terms may have the same extension yet not have the same meaning."<sup>2</sup> "Centaur" and "unicorn", for example, have the same extension but do not have the same meaning, as do "equilateral triangle" and

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<sup>1</sup>Nelson Goodman, "On Likeness of Meaning," Semantics and the Philosophy of Language, ed. L. Linsky, p. 67.

<sup>2</sup>Ibid., p. 69.

"equiangular triangle". For this reason Goodman concludes that sameness of extension cannot be an acceptable criterion of sameness of meaning.

To account for differences of meaning, however, Goodman does not want to appeal to anything beyond words and their extensions--he does not want to admit that meanings are ghostly entities "that are distinct from words and their extensions."<sup>1</sup> In a more recent article he has said that "the paramount problem is to deal with comparisons of meaning without reference to intensions, attitudes or modalities."<sup>2</sup> Goodman thus wants to account for differences of meanings of words in terms of extension alone but, as he has shown, differences of extension of the words whose meanings are being examined are not sufficient to account for differences in their meaning.

Goodman notices, however, that in spite of the fact that the extensions of "centaur" and "unicorn" are the same, certain compounds of these words may be formed such that the extension of these compounds will vary. The extension of "centaur-picture", for example, is not the same as that of "unicorn-picture". This fact suggests to Goodman a criterion of sameness of meaning:

Although two words have the same extension, certain

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<sup>1</sup>Ibid., p. 70.

<sup>2</sup>Nelson Goodman, "On Some Differences About Meaning," Analysis, XIII (1952-1953), p. 92.

predicates composed by making identical additions to these two words may have different extensions. It is then perhaps the case that for every two words that differ in meaning either their extensions or the extensions of some corresponding compounds of them are different. If so, difference of meaning among extensionally identical predicates can be explained as difference in the extension of certain other predicates. Or, if we call the extension of a predicate by itself its primary extension, and the extension of any of its compounds its secondary extension, the thesis is formulated as follows: two terms have the same meaning if and only if they have the same primary and secondary extensions. Let us, in order to avoid entanglement with such terms as "thought of...", "concept of...", "attribute of...", and "meaning of...", exclude from consideration all predicates that apply to anything but physical things, classes of these, classes of classes of these, etc. If the thesis is tenable, we have answered our question by stating, without reference to anything other than terms and the things to which they apply, the circumstances under which two terms have the same meaning.<sup>1</sup>

Now, any two words "P" and "Q" may have as part of their secondary extension the extensions of "P-description" and "Q-description". But the phrase "a P that is not a Q" is a P-description that is not a Q-description; hence "P" and "Q" differ in secondary extension and thus in meaning. Since "P" and "Q" can be any two words whatsoever it may be concluded that no two words have the same meaning. Goodman advises us that "we shall do better never to say that two predicates have the same meaning but rather that they have a greater or lesser degree, or one or another kind, of

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<sup>1</sup>Nelson Goodman, "On Likeness of Meaning", Semantics and the Philosophy of Language, ed. L. Linsky, p. 71.

likeness of meaning."<sup>1</sup>

He then proceeds to relate these conclusions regarding meaning to the question of the existence of non-repetitive analytic statements. A sentence is said to be analytic, on Goodman's view, if the meaning of the predicate B is contained in that of the subject A.<sup>2</sup> However, because there is a B-description that is not an A-description and an A description that is not a B-description the meaning of A cannot be said to be included in the meaning of B, nor the meaning of B in that of A. Consequently, "no non-repetitive statement will be analytic. The most that we can say is that it is more, or less, nearly analytic."<sup>3</sup>

Richard Rudner has contended that Goodman's arguments entail not just the conclusion that no non-repetitive statements are analytic and that no two words have the same meaning but also the further consequences that no two occurrences of the same word have the same meaning and accordingly that

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<sup>1</sup>Ibid., p. 73.

<sup>2</sup>Although Goodman does not here seem to be taking "analytic" to mean what we defined it in Chapter II as meaning, his thesis that no two words have the same meaning, given even the definition of "analytic" which we arrived at, would still entail the conclusion that there are no non-repetitive analytic statements and so his argument, although based on a definition of "analytic" which has been rejected, is nevertheless relevant to our discussion.

<sup>3</sup>Nelson Goodman, "On Likeness of Meaning", Semantics and the Philosophy of Language, ed. L. Linsky, p. 73.

not even repetitive statements are analytic. One might think that Rudner was attempting to reduce Goodman's thesis to absurdity, but in fact he seems to think that he is supporting Goodman while at the same time furthering the interests of pragmatism.

In arguing that no repetitive statement is analytic Rudner asks us to consider the sentence (S) "A rose is a rose" and to let "PS<sub>5</sub>" stand for the predicate "rose description which occurs in the fifth place in S". Rudner then says:

a conclusion of Dr. Goodman's discussion is that two terms cannot have the same meaning. If a pair of terms is not different, then if one of them is included in the extension of a predicate, the other is. But it seems clear that the predicate PS<sub>5</sub> is applicable to the fifth word of S, while it is not applicable to the second word of S. The second term, then, must be different from the fifth and, therefore, according to his arguments, cannot have the same meaning as the fifth. From this it would follow that S is not analytic.<sup>1</sup>

C. D. Rollins, like Rudner, would argue that Goodman's criterion entails that the meaning of "TRIANGLE" differs from that of "triangle" for, if "the secondary extension of 'TRIANGLE' and 'triangle'" means the marks including "TRIANGLE" or "triangle" then, since "TRIANGLE-description" and "triangle-description" could be shown to differ in extension (because one applies to "A TRIANGLE that is not a triangle" and the

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<sup>1</sup>Richard Rudner, "A Note on Likeness of Meaning," Analysis, X (1949-1950), p. 116.

other to "A triangle that is not a TRIANGLE") it could be shown that "TRIANGLE" and "triangle" differ in meaning. Rollins then adds that on Goodman's theory "if I mistakenly wrote a word twice in succession in a sentence I should study carefully which to strike out."<sup>1</sup> Rollins here seems to be trying to establish the same point that Rudner tries to establish; his purpose, however, is different. Rudner wants us to accept not only Goodman's original thesis but also these alleged consequences, while Rollins is attempting to reduce Goodman's thesis to absurdity by showing that it entails these consequences.

In a note on Rudner's paper, Mrs. B. L. Robbins denies that Goodman's thesis has the consequences Rudner alleges. As I understand it, Mrs. Robbins' argument is as follows. Let "I<sub>1</sub>" and "I<sub>2</sub>" represent what the plain man would take to be two instances of the same word occurring in a given sentence. Now Rudner tries to argue that the secondary extension of "I<sub>1</sub>" and "I<sub>2</sub>" can be shown to differ, for one can construct an I-compound predicate which is applicable to I<sub>2</sub> but not to I<sub>1</sub>. Mrs. Robbins notices, however, that (1) if "I<sub>1</sub>" and "I<sub>2</sub>" occurred in the original sentence in coumpounded form (i.e., if the original sentence were "A rose-

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<sup>1</sup> C. D. Rollins, "The Philosophical Denial of Sameness of Meaning," Analysis, XI (1950-1951), p. 44.

description occurring in  $PS_5$  is a rose-description occurring in  $PS_5$ ") then this would be their primary extension. They would then have no secondary extension and so their (null) secondary extension and meaning would be the same. (2) If, on the contrary, they do not appear in the original sentence in compounded form (i.e., if the original sentence is simply "A rose is a rose") then, unless one appeals to the notion of different replicas of a given word having the same meaning (which would be incompatible with the truth of Rudner's thesis), Rudner's conclusion would not follow either, for Rudner must assume that the " $I_1$ " or " $I_2$ " occurring as part of his I-compound is a replica of " $I_1$ " or " $I_2$ " in the original sentence and has the same meaning as the " $I_1$ " or " $I_2$ " in this sentence. If he did not assume this, then whatever he proved about his I-compounds would have no bearing on the " $I_1$ " or " $I_2$ " occurring in the original sentence. Thus to argue for his thesis Rudner must assume something which is incompatible with his thesis and hence his argument may be considered as self-refuting.

Quite apart from Mrs. Robbins' criticism of Rudner, his argument seems to me to be invalid because it is based on a misinterpretation of Goodman's criterion. Goodman would allow us to say that "two terms are synonymous if and only if (a) they apply to exactly the same objects, and (b) each compound term constructed by combining words with either of

the terms in question applies to exactly the same objects as the compound term constructed by combining the same words in the same way with the other of the terms in question."<sup>1</sup> Rudner, however, has taken Goodman as holding that "if a pair of terms is not different, then if one of them is included in the extension of a predicate the other is"<sup>2</sup> which is quite a different criterion from the conjunction of Goodman's (a) and (b). Therefore even if Rudner's conclusion followed from Rudner's criterion (which is at best doubtful) this is not to say that it follows from Goodman's, for Rudner has not tested Goodman's criterion in the prescribed manner. Hence whether or not Rudner's argument is immune to whatever difficulties Mrs. Robbins sees in it, it still is not valid, and consequently Goodman's thesis cannot be extended in the way Rudner suggests, at least not on the arguments Rudner gives for such an extension.

Mrs. Robbins' criticism of Rudner's argument has been endorsed by Goodman, who does not wish to see his thesis extended in the way Rudner has proposed. After commenting on Rudner's and Mrs. Robbins' articles, Goodman concludes, "what follows is not that every two word-events differ in meaning but only that every two word-events that are not

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<sup>1</sup>Nelson Goodman, "On Some Differences About Meaning," Analysis, XIII (1952-1953), p. 90.

<sup>2</sup>Rudner, op. cit., p. 116.

replicas of each other differ in meaning."<sup>1</sup> In view of this last statement, Lester Meckler asks<sup>2</sup> how Goodman would distinguish different replicas of a word from different words. Would "dog", "DOG", and "dOg", but not "canine" be different replicas of the same word? And what about "dog" and "dog"? Surely these marks, too, differ in many (microscopic) ways which are just not as obvious as the differences between "god" and "dog". Why are "gut" (English) and "gut" (German) not different replicas of the same word? As Meckler notes, whatever answer Goodman would give to this question cannot involve the notion of meanings, for such an appeal would be clearly circular. Meckler therefore contends that whether or not Goodman has successfully relieved his theory from Rudner's alleged implications, the difficulties his thesis involves are still great indeed.

Other difficulties, too, have been found in Goodman's theory. Robert A. Price objects to Goodman's criterion of synonymy on the grounds that certain marks which are not even meaningful could have secondary extension and hence that secondary extension should not be part of a criterion of

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<sup>1</sup>Nelson Goodman, "On Some Differences About Meaning," Analysis, XIII (1952-1953), p. 92.

<sup>2</sup>Lester Meckler, "On Goodman's Refutation of Synonymy," Analysis, XIV (1953-1954), pp. 74-75.

meaning. For example, "glub" and "gloob" have secondary extension, since "a glub that is not a gloob" is a glub-description that is not a gloob-description. To this criticism Goodman replies<sup>1</sup> that his criterion is only meant to apply to names or predicates in a language and that Price's objection is consequently irrelevant.

Price advances a second objection. Since, according to Goodman, no two expressions have the same meaning, Goodman must hold either (1) that definitions are impossible, in which case dictionaries are useless; or (2) that "there is a weaker sense of meaning in which synonymy is possible."<sup>2</sup> If this is Goodman's position then he has given us no clue as to what the weaker sense of "synonymy" is, nor as to what we are to use as a criterion of it. Secondary extension cannot be used because of the objection raised above. Sameness of primary extension is not satisfactory, for "centaur" and "unicorn" would then qualify as synonyms. Goodman, in reply, says he intended alternative (1) but denies that this commits him to the thesis that dictionaries are useless; on the contrary, he says, dictionaries may be useful "because they join expressions that are much alike in meaning."<sup>3</sup>

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<sup>1</sup>Nelson Goodman, "On Some Differences About Meaning," Analysis, XIII (1952-1953), p. 93.

<sup>2</sup>Robert A. Price, "A Note on Likeness of Meaning," Analysis, XI (1950-1951), p. 19.

<sup>3</sup>Goodman, loc. cit.

C. D. Rollins has raised another objection which I find rather curious. "It is perfectly obvious", he writes, "that we often do say, agree, prove and disprove that two words have the same meaning."<sup>1</sup> Only if this is true, Rollins maintains, would Goodman's denial of sameness of meaning of different words make sense. Since Goodman's denial does make sense it can be inferred that we really do prove and disprove words to have the same meaning and consequently Goodman's thesis is false. "Thus the sense of Goodman's claim makes it false and its truth would render it senseless."<sup>2</sup>

In commenting on Rollins's argument, Paul Wienpahl agrees that we do say that different words have the same meaning but contends that we, in saying so, could be wrong. Consequently Rollins' appeal to common sense does not refute Goodman. Wienpahl also queries Rollins' charge that Goodman's conclusion would not make sense unless it were false. "Why", he asks, "can we not say no two words have the same meaning and yet speak meaningfully just as we can meaningfully say that no two men have the same finger-prints?"<sup>3</sup>

Rollins would, I think, reply that we would never have

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<sup>1</sup>Rollins, op. cit., p. 39.

<sup>2</sup>Ibid., p. 40.

<sup>3</sup>Paul Wienpahl, "More About the Denial of Sameness of Meaning," Analysis, XII (1951-1952), p. 20.

come to understand the words "same meaning" unless there were some things to which they were applied and correctly applied. As Kneale has noticed<sup>1</sup>, the existence of a notion such as redness licenses an inference to the existence (past or present) of a red thing. Similarly Rollins might argue from our possession of the notion of sameness of meaning to the actual existence of words having the same meaning. But this would only be valid if it were the case (as it is with "red") that we could only have come to know the meaning of "same meaning" ostensively, i.e., by having people direct our attention to words which have the same meaning while uttering the words "same meaning". Since we cannot have learned the meaning of "meaning" by means of a verbal definition of "meaning" it might seem that we must have learned the meaning of "same meaning" in an ostensive manner, and if our notion of sameness of meaning has to be accounted for in this way then I think it must be admitted that the words to which our attention was supposedly directed must have been synonymous. What I doubt, however, is that we must have learned the meaning of "same meaning" in the way described above, although of course we may in fact have learned it in this way. It seems at least possible that people could learn the meaning

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<sup>1</sup>William Kneale, "Is Existence a Predicate?", Readings in Philosophical Analysis, eds. H. Feigl and Wilfrid Sellars, p. 35.

of "meaning" by hearing conversations of the following kind: (i) "What does 'dizzy' mean?", "Oh, 'dizzy' means the kind of feeling you have when you turn around quickly several times"; (ii) "What does 'yellow' mean?", "'Yellow' means this colour", and (iii) "What does 'table' mean?", "'Table' means this kind of object" (accompanied by pointing gestures to several tables). And I am quite sure that the meaning of the word "same" was somehow learned by all of us long before we became sophisticated enough to compare meanings. Now if our knowledge of the meaning of "meaning" and "same" could have come about in the way I have described then, from the fact that we understand the words "same meaning", it cannot be inferred that there must be synonymous words, and hence Rollins' conclusion need not be admitted.

One of the many objections Meckler has raised to Goodman's theory is that "if it is true it is undemonstrable".<sup>1</sup> Meckler argues that reasoning other than that of the form "A implies A" involves substituting and replacing synonymous words and phrases for each other which, if Goodman's theory were correct, would not strictly speaking be possible. If such logical manipulations were nevertheless carried out on the grounds of more or less likeness of meaning between the substituted words then the conclusion of such a reasoning

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<sup>1</sup>Meckler, op. cit., p. 68.

process would always involve a certain amount of error for one of the premises could always be said to be not strictly speaking true. Thus if Goodman's thesis were true, then no argument could demonstrate either its truth or that of any other thesis.

Meckler alleges further that Goodman's premises, far from yielding Goodman's conclusion--viz., that no two words have the same meaning--yield rather the quite different conclusion that any two words have the same meaning. Part of the secondary extension of any two words "P" and "Q", Meckler argues, is the extension of "P-contraster" and "Q-contraster". Since "P-contraster" applies to everything that is not-P, since "P" applies to everything that is P, since "Q-contraster" applies to everything that is not-Q, and since "Q" applies to everything that is Q, then the extension (primary and secondary) of both "P" and "Q" will be everything. And if "P" and "Q" have the same primary and secondary extension, then, according to Goodman's criterion, they will have the same meaning. Since "P" and "Q" could be any two words whatsoever no two words differ in meaning.

In arriving at this conclusion Meckler seems to me to be taking advantage of the ambiguity of Goodman's original formulation of his criterion, for what Goodman originally said might seem to imply that if the sum of the primary and secondary extensions of two words were the same then their

meaning would be the same. However, in a more recent formulation<sup>1</sup> of this criterion (published prior to the publication of Meckler's article) Goodman has made it clear that he would only be willing to say that two words have the same meaning if (a) they have the same secondary extension, and (b) they have the same primary extension. On this interpretation of Goodman's criterion Meckler's conclusion would clearly not follow, since many pairs of words fulfill neither condition (a) nor (b).

Objections have been raised by both Rollins<sup>2</sup> and Meckler<sup>3</sup> to the effect that Goodman's theory does not accord with common usage. Such a complaint, I believe, should not have been made if it were not for the fact that several of Goodman's remarks seem to indicate, as J. F. Thomson has noticed<sup>4</sup>, that Goodman appears confused about the significance of his theory: he does not make clear whether he is trying to provide a definition of "synonymy", or a criterion of synonymy. Now, if Goodman were giving us a definition of "synonymy" it would be quite in order for a complaint to be made to the effect that his definition was not in accord with common usage.

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<sup>1</sup>Nelson Goodman, "On Some Differences About Meaning", Analysis, XIII (1952-1953), p. 90.

<sup>2</sup>Rollins, op. cit., pp. 38-41.

<sup>3</sup>Meckler, op. cit., p. 70.

<sup>4</sup>J. F. Thomson, "Some Remarks on Synonymy," Analysis, XII (1951-1952), p. 73.

But the great majority of Goodman's remarks indicate that it is a criterion that he is offering rather than a definition. Indeed, surely this is all that Goodman could be doing, for on his theory a definition of "synonymy" would be impossible. If Goodman is giving us a criterion of synonymy, however, then the fact that the adoption of this criterion would result in statements being made which were not in accord with common usage is not a point against Goodman's theory.

However, if we take Goodman's theory as offering us a criterion about sameness of meaning, other questions might still be raised. Even granting that Goodman has established the proposition "No two statements have the same meaning", can we immediately infer--as he apparently believes he can--the proposition "No two words are synonymous"? Surely not; surely such an inference could be made only if "same meaning" means the same as "synonymous". Yet on Goodman's theory, this could not be the case. It would thus follow that if Goodman really has shown that no two words have the same meaning, he has not, in establishing this, demonstrated that no two words are synonymous.

And even if Goodman were able to express his criterion of sameness of meaning in a consistent way so as to meet all the objections which have been raised against it, might it not still be asked what reason there is for accepting such a criterion? As far as I can see there are only two possible

conditions which could render a criterion or standard of sameness of meaning acceptable, neither of which conditions Goodman's criterion has been shown to meet. (1) A criterion or standard of analyticity might be self-evidently or necessarily true. However, in view of the debate and objections which Goodman's criterion has aroused it is hardly likely that his criterion meets this condition. Furthermore, Goodman has made no attempt to argue that his criterion does meet this condition and, in view of the fact that Goodman has indicated<sup>1</sup> a general attitude of hostility to claims that non-repetitive statements are necessary, it seems unlikely that he would wish to make such a claim for his criterion. (2) Certain facts could be taken to be pre-analytic data which a satisfactory criterion of synonymy would be required to entail. More specifically, a criterion could be required to entail (a) that certain pairs of expressions, such as "triangle" and "plane figure bounded by three straight lines" or "brother" and "male sibling", have the same meaning; and (b) that certain other pairs of expressions, such as "centaur" and "unicorn" or "equiangular triangle" and "equilateral triangle", do not have the same meaning. Only if the application of a suggested criterion yielded results which were in accord with these pre-analytically accepted facts would it be

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<sup>1</sup>Nelson Goodman, "On Likeness of Meaning," Semantics and the Philosophy of Language, ed. L. Linsky, p. 74.

considered acceptable. However, while Goodman has admirably shown that his criterion implies (b), he has not shown or even attempted to show that it implies (a). Since Goodman's criterion has thus not been shown to meet either condition (1) or (2), it may be concluded that no good reason has been given in favour of its acceptance.

Goodman, in presenting his criterion, has argued in a curious fashion. He first shows that "it is perhaps the case for every two words which differ in meaning either their extensions or the extensions of corresponding compounds of them are different"<sup>1</sup>; and then says that if this is true, his criterion of sameness of meaning is implied. Goodman then assumes that his criterion is established and so proceeds to argue that no two words have the same meaning, using as grounds for this contention the truth of his criterion. Such an assumption is of course not legitimate, for between showing a thesis to be perhaps true and showing it to be true there is a world of difference.

Goodman's criterion also seems to me implausible for the reason that I do not see how it could account for two words becoming less alike in meaning over a given period of time. According to Goodman, the truth of the statement "Word 'X' means the same as word 'Y' means" (which is a present

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<sup>1</sup>Nelson Goodman, "On Likeness of Meaning", Semantics and the Philosophy of Language, ed. L. Linsky, p. 71. My italics.

indicative statement) depends on the past, present and future extension of these words.<sup>1</sup> Thus it will not be the case that words "X" and "Y" have (now) the same meaning if the past, present, or future extensions of these words differ. Now, if the future extension of these words is part of the criterion of their present difference in meaning, what could be a criterion for these words becoming less alike in meaning in the future? It could not be argued that one could discover whether or not words become less alike in meaning in the future by examining whether in the future their extensions differ more than they do now for, according to Goodman, the future extensions of these words are part of the criterion of their present sameness or difference of meaning.

But even if Goodman's criterion of sameness of meaning were established (which it is not), need one accept the alleged consequence that no two words have the same meaning? To show that this question should be answered negatively I shall attempt to show that Goodman's argument in favour of his denial of sameness of meaning of different words is not valid, even given the truth of his criterion of sameness of meaning. Goodman argues that because for any two words "P" and "Q" there is, in the phrase "a P that is not a Q", a P-description

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<sup>1</sup>Nelson Goodman, "on Likeness of Meaning," Semantics and the Philosophy of Language, ed. L. Linsky, p. 69. Goodman there says, "the extensions of a predicate consists, of course, of everything past, present, and future, to which the term applies."

that is not a Q-description, the secondary extension, and consequently the meaning, of "P" and "Q" must differ. This argument, however, would only be acceptable if the predicate "P-description" actually has as part of its extension the phrase "a P that is not a Q". Now Goodman has told us that "the extension of a predicate consists, of course, of everything past, present and future, to which the term applies."<sup>1</sup> Thus Goodman's argument would only be acceptable if it were the case that "P-description" did apply, does apply or will apply, to the phrase "a P that is not a Q". (It is important, however, not to confuse this last statement with the quite different statement that Goodman's argument would only be acceptable if it were the case that "P-description" could have been applied to, could now be applied to, or could in the future be applied to, the phrase "a P that is not a Q": since Goodman emphasizes<sup>2</sup> that his aim in proposing his criterion was to avoid modal terms and references to possibilities it cannot be the case that Goodman means to be interpreted in this latter way.) Now it could not possibly be the case that "P-description" did apply, does apply, or will apply to an inscription "a P that is not a Q" unless

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<sup>1</sup>Ibid.

<sup>2</sup>Nelson Goodman, "On Some Differences About Meaning," Analysis, XIII (1952-1953), p. 92.

it is the case that there really was, is, or will be (not could be) corresponding inscriptions for every pair of allegedly synonymous words that Goodman holds to differ in meaning, for otherwise he could not show these words to have different secondary extensions and different meanings. Now, while such variants of the phrase "a P that is not a Q" could be written down for all values of "P" and "Q" it seems highly unlikely that they were, are, or will be written down. At any rate, since Goodman has given us no evidence that such inscriptions have occurred, do occur or will occur (but only perhaps that they could occur, which is irrelevant), he has not produced any evidence even to make probable his conclusion that no two words have the same secondary extension or meaning. Thus even if one accepted Goodman's criterion of meaning one would not also have to accept his conclusion that all words differ in meaning.

Let us suppose that as a matter of fact there has not been, is not, and will not be an inscription "a dog that is not a canine" and that "dog" and "canine" have the same meaning. Now, if there were or were to be such an inscription why should the mere existence of such an inscription render the meaning of the words "dog" and "canine" different from what they now are? I would be quite willing to admit that if anyone were ever seriously to assert that something was a dog but not a canine that that person could not be using

"dog" and "canine" synonymously; however, it is not the mere existence of the inscription "a dog that is not a canine" that would be evidence for the fact that this person meant something different by "dog" from what he meant by "canine", but rather the existence of this inscription plus the fact that this inscription expressed an actual belief of someone. Even if both these conditions were shown to be true, however, one would still only have evidence that that person meant something different by "dog" and "canine", unless one could also show that people generally would under certain circumstances be willing to believe that something was a dog but not a canine. And surely, given the present meanings of "dog" and "canine", no one would be willing seriously to assert this. Thus even if one accepted Goodman's criterion of synonymy and assumed that for every two allegedly synonymous words "P" and "Q" there actually was an inscription of the form "a P that is not a Q" I do not see why one could not still deny that "P" and "Q" differed in meaning. One might still maintain either (1) that in spite of someone's writing the phrase "a P that is not a Q" no one seriously would apply this to anything and that the existence of a pattern of marks alone proved nothing about the synonymy of words; or (b) that at most it had been shown that one person means something different by "P" and "Q" but not that people generally do.

I would thus conclude that (1) there is no good reason

to accept Goodman's criterion of sameness of meaning; and that (2) even if this criterion were accepted it would still not follow that no two words have the same meaning. And since this would not follow, then Goodman's denial of the existence of non-repetitive analytic statements (being dependent on evidence the lack of which rendered invalid Goodman's argument that no two words have the same meaning) would also not follow. Thus, while it is of course possible that there are no non-repetitive analytic statements, Goodman has provided no good reason for believing that there are none.

However, it has been believed that an argument quite different from that of Goodman can be given for the view that no two words are synonymous. Such an argument, if valid, would also entail the conclusion that there are no non-repetitive analytic statements. This second argument, which proceeds from considerations regarding the interchangeability of words, will now be discussed.

While many philosophers often ignore carefully expounded criticisms of their views, it is seldom the case that objections to a philosophical theory are raised by the very men who defend the theory. Plato, in putting forth the "third man argument"<sup>1</sup>, would be a notable exception to this

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<sup>1</sup>Plato, Parmenides, in F. M. Corford, Plato and Parmenides, pp. 87-90.

rule. And perhaps the defenders of the synthetic-analytic distinction would constitute another exception, for it seems that one of the problems which has caused them most concern is a problem of their own creation.

The problem I am referring to is that of interchangeability. It has often been said, by philosophers of all persuasions, that synonymous words are interchangeable salva veritate in all non-linguistic statements. And it is generally admitted by defenders of the synthetic-analytic distinction that if no two words are synonymous then no non-repetitive statement is analytic. When it was recently argued that no two words are interchangeable in all contexts without change of truth value the defenders of the synthetic-analytic distinction interpreted this as an argument in favour of the view that no two words are synonymous and that consequently no non-repetitive statement is analytic.

The philosopher most responsible for the argument that no two words are interchangeable salva veritate in all non-linguistic statements is Benson Mates, who is himself a defender of the synthetic-analytic distinction. The article in which Mates argued against interchangeability has provoked a number of responses from others who defend the synthetic-analytic distinction but who regard Mates' thesis as being incompatible with their view that there are indeed synonymous words and non-repetitive analytic statements. Although Mates'

views have been regarded as weapons against the synthetic-analytic distinction by defenders of this distinction oftener than they have been used as such against it by opponents of the distinction, nevertheless, because his views have provoked such a controversy among contemporary philosophers, I shall briefly outline the debate over this issue.

It has long been generally admitted that synonymous words are not substitutable for each other in all statements in which either occurs but only in non-linguistic ones. Thus the fact that "male sibling" is not substitutable salva veritate for "brother" in the statement "'Brother' has seven letters", or in the statement "The statement 'John is the brother of Mary' has six words", has never been counted as evidence either for or against the thesis that "brother" and "male sibling" are synonymous.

There is also one more generally recognized exception to the dictum that synonymous words are interchangeable salva veritate. If a word "A" is used in two senses, "A<sub>1</sub>" and "A<sub>2</sub>", and another word "B" is alleged to be synonymous with one of the senses of "A", let us say with "A<sub>1</sub>", then "B" has never been required to be substitutable without change of truth value for "A" whenever "A" occurs, but rather only for "A" when "A" is used in the sense of "A<sub>1</sub>". This raises the problem which Quine has noticed<sup>1</sup> of deciding, without appeal

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<sup>1</sup>W. V. Quine, From a Logical Point of View, p. 28.

to interchangeability, when "A" is being used in the sense of "A<sub>1</sub>" and when it is being used in the sense of "A<sub>2</sub>". However, since this problem is not central to the synthetic-analytic dispute, I shall not discuss it here.

What is important is that it was generally believed until very recently that if "B" is synonymous with "A" (in the sense of "A<sub>1</sub>") then, whenever "A" (in the sense of "A<sub>1</sub>") occurs in a non-linguistic statement, "B" is substitutable for it salva veritate and vice-versa. The strength of this belief was such that if a statement typical of everyday speech could be found in which two allegedly synonymous words were not substitutable for each other without change of truth-value then the hypothesis was immediately abandoned that the words being considered were synonymous. When, in 1950, Mates argued that no two words are interchangeable in the way previously thought his argument was interpreted as providing grounds for saying that no two words are synonymous. Consequently many attempts have been made since then by those who defend synonymy and analyticity to refute his argument.

Mates' argument runs as follows. Take any non-linguistic statement whatsoever in which one member of an allegedly synonymous pair of words occurs; for example, if "brother" and "male sibling" are alleged to be synonymous we could take the statement (1) "Smith has a brother." Now statement (1) occurs in the subordinate clauses of statement (2):

"Whoever believes that Smith has a brother believes that Smith has a brother", and this statement seems indubitably true. However, if we substitute "male sibling" for the second occurrence of "brother" in (2) we get (3): "Whoever believes that Smith has a brother believes that Smith has a male sibling ", which, Mates says, is certainly not indubitably true and might very well be false. Thus while (4): "Nobody doubts that whoever believes that Smith has a brother believes that Smith has a brother" seems indubitably true, (5): "Nobody doubts that whoever believes that Smith has a brother believes that Smith has a male sibling" does not. Hence the words "brother" and "male sibling" are not interchangeable salva veritate in all non-linguistic statements, and this conclusion may be demonstrated for any pair of allegedly synonymous terms whatsoever.

Allegedly synonymous words do not only seem not to be always interchangeable salva veritate in statements containing the words "believe" or "doubt", but also in statements containing other "mental process words" such as "think" or "question". All such statements are alike in that they all contain subordinate clauses in indirect discourse in which one member of a pair of allegedly synonymous words does not seem to be substitutable for the other. That statements containing clauses in indirect discourse present special problems for the philosopher is not a new discovery of Mates, for as early

as 1892 Frege commented<sup>1</sup> upon the peculiarity of statements of this type. What is significant, however, is that Mates relates the problem of interchangeability of words in statements in indirect discourse to that of synonymy.

Just what Mates thinks he has proven by his argument that allegedly synonymous words are not always substitutable for each other salva veritate is a matter over which there seems to be much disagreement. In the opinion of certain writers, Mates is arguing that since no two words are interchangeable for each other in all non-linguistic statements then no two words are synonymous, from which it would follow that no non-repetitive statement is analytic; while others have taken him merely to be saying that synonymous words are not always interchangeable salva veritate, for no two words are substitutable for each other in all statements.

While I believe Mates actually takes this latter position he has expressed himself in such a way that it is understandable that these different interpretations of his views have arisen, for one finds Mates making remarks which would seem to support both interpretations. In support of the former interpretation one might quote, as David Shwayder

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<sup>1</sup>Gottlob Frege, "On Sense and Nominatum," Readings in Philosophical Analysis, eds. H. Feigl and W. Sellars, p. 93.

has<sup>1</sup>, Mates' dictum that "two expressions are synonymous in Language L if and only if they may be interchanged in each sentence in L without altering the truth value of that sentence"<sup>2</sup>; for from this it would seem to follow that if no two expressions may be interchanged in each sentence in a language without altering the truth value of that sentence then no two expressions in the language are synonymous. But on the other hand, Mates goes on to say that he intends this condition "to apply only to languages which are not semantically closed, that is, to languages which do not contain names of their own expressions and semantical terms like 'true', 'denotes' and so forth. In particular, it is important that the language L not contain the semantical term 'synonymous in L'."<sup>3</sup> Since everyday English and other natural languages are semantically closed it could be argued that Mates does not intend his criterion to be applied to them and that he would consequently not argue that no two expressions in a natural language are synonymous, but rather

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<sup>1</sup>David Shwayder, "Some Remarks on 'Synonymity' and the Language of Semanticists," Philosophical Studies, V (1954), p. 2.

<sup>2</sup>Benson Mates, "Synonymity," Semantics and the Philosophy of Language, ed. L. Linsky, p. 119.

<sup>3</sup>Ibid., p. 120.

that no synonymous expressions of a natural language are interchangeable salva veritate in all contexts. The fact that Mates has, in another article<sup>1</sup>, defended the synthetic-analytic distinction would seem to give support to this interpretation of his position. But in any case, whether or not Mates actually intends to argue against the existence of synonymous words in a natural language is really not important; for on this interpretation Mates' argument does constitute a threat to the synthetic-analytic distinction and so must be examined. Consequently we must consider both interpretations of Mates' views.

Just as Rudner argued that a consequence of Goodman's criterion of synonymy is that no two occurrences of the same word are synonymous so Shwayder has argued that Mates' thesis also entails such an extension, although, while Rudner was intending to support Goodman, Shwayder intends his remarks to be understood as a criticism of Mates' (alleged) position. Shwayder claims that we can "construct examples where the same word will not, on Mates' criterion, be synonymous with itself, and yet where we would not say that the word is being used ambiguously".<sup>2</sup> Mates would grant, Shwayder assumes, that

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<sup>1</sup>Benson Mates, "Analytic Sentences," Philosophical Review, IX (1951).

<sup>2</sup>Shwayder, op. cit., p. 3

the meaning of a word is not affected by the manner in which it is inscribed on paper, or the colour of ink that is used, provided that the sign is recognized as a token of a particular type, and that tokens of the same type may be substituted for each other. But consider the following two statements: (a) "My little boy thinks that 'rouge' means the same as 'red'" and (b) "My little boy thinks that 'rouge' means the same as 'red'". Although "rouge" and "rouge" are tokens of the same type, statement (a) may be used to make a true statement; statement (b) to make a false one. Shwayder therefore contends that Mates must either give up his dictum that synonymous words are interchangeable for each other salva veritate or admit that the same word is not synonymous with itself.

However, while Shwayder's example does appear to violate Mates' rule about synonymous expressions being interchangeable in each statement in which either occurs, Mates has also explicitly said that this rule is intended to apply only to languages which do not contain names of their own expressions, and this qualification would preclude Shwayder's example. For this reason I do not feel that Shwayder's argument is a valid criticism of Mates' position. Nor would Shwayder's criticism be validly applicable to the orthodox claim about interchangeability; for this claim is expressly a claim about interchangeability of words in non-linguistic statements

whereas (b) above is not a non-linguistic statement.

But other, and I believe stronger, criticisms have been made of Mates' argument by Pap, Church and Wilfrid Sellars. These three philosophers defend the view that synonymous expressions in a natural language are interchangeable in all non-linguistic statements and yet at the same time, and in spite of what Mates has said, argue that this does not lead to the conclusion that no two expressions are synonymous. While Pap, Church, and Sellars refer explicitly to Mates' theory, they also relate their remarks to a theory of intensional isomorphism which Carnap once held.<sup>1</sup> But since this theory of intensional isomorphism is not explicitly related to analyticity, since Carnap has now abandoned it, and since it is mainly applied to artificial rather than natural languages, I am not going to discuss either it or the implications of Mates' thesis on it. I shall, however, outline Pap's, Church's, and Sellars' criticisms of Mates' remarks on synonymy.

In Pap's view<sup>2</sup>, Mates' argument depends on the possibility that someone may believe, for example, that Smith

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<sup>1</sup>Rudolf Carnap, Meaning and Necessity, pp. 56-59.

<sup>2</sup>Arthur Pap, "Belief, Synonymity and Analysis," Philosophical Studies, VI (1955), p. 13.

has a brother yet not believe that Smith has a male sibling and, according to Pap, this could not occur unless a person did not know that "Smith has a brother" and "Smith has a male sibling" are synonymous. Pap argues, however, that if these statements are synonymous then "A believes that Smith has a brother" and "A believes that Smith has a male sibling" will be just two different ways of expressing the same proposition and so the former statement will entail the latter. If this is so then "A believes that Smith has a male sibling" could not be false when "A believes that Smith has a brother" is true. Consequently, whether or not A is aware that "brother" and "male sibling" are synonymous, these words will nevertheless be interchangeable. According to Pap, then, the old dictum that synonymous words are substitutable salva veritate in all non-linguistic statements has not been disproved nor does Mates' argument entail that there are no synonymous words but, at most, suggests that not all people may be aware that certain words are synonymous.

A similar conclusion is argued for in a different manner by Church and Sellars. Church argues<sup>1</sup> that if one does not doubt (2): "Whoever believes that Smith has a brother believes that Smith has a brother", it is not possible for one to doubt (3): "Whoever believes that Smith has a brother

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<sup>1</sup>A. Church, "Intensional Isomorphism and Identity of belief," Philosophical Studies, V (1954), p. 69.

believes that Smith has a male sibling." Church admits that people may think that they doubt (3) but not (2) but submits that in such a situation what they are really doubting is not (3) but rather a linguistic statement in which the words "Smith has a male sibling" are actually referred to rather than used. A similar point is made by Sellars who argues that it is only possible to doubt (3) but not (2) if we are interpreting (2) and (3) as covertly mentioning the words "brother" and "male sibling" as used by the person who believes that Smith has a brother, in which case Mates' point could not be made, inasmuch as the question of synonymy does not arise with regard to words which are being referred to rather than used. Thus Church and Sellars, like Pap, defend substitutability but deny that this has any unfortunate implications regarding synonymy.

Unlike Shwayder, Pap, Church and Sellars, Hilary Putnam has not interpreted Mates' argument as suggesting that there are no synonymous words, but rather as "arguing against the widely held view that expressions with the same sense are interchangeable in all contexts."<sup>2</sup> Mates' argument might be used, Putnam admits, to support the conclusion that no two

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<sup>1</sup>Wilfrid Sellars, "Putnam on Synonymity and Belief," Analysis, XV (1954-1955), 119.

<sup>2</sup>Hilary Putnam, "Synonymity and the Analysis of Belief Sentences," Analysis, XIV (1953-1954), p. 114.

different expressions are synonymous but he believes that "the felt synonymy of such different expressions as 'snow is white' and 'Schnee ist weiss' or.... of 'Greek' and 'Hellene' is undeniable."<sup>1</sup> But since Putnam also believes that (2) and (3) above may have different truth-values he finds himself committed to denying that the synonymy of (2) and (3) follows from the synonymy of "brother" and "male sibling". Now to deny this amounts, according to Putnam, to a denial that "the sense of a sentence is a function of the sense of its parts"<sup>2</sup>, a denial which Putnam is prepared to make. In place of this rule he puts forth the rule that "the sense of a sentence is a function of the sense of its parts and of its logical form."<sup>3</sup> This rule would then allow him to claim that "brother" and "male sibling" are synonymous but at the same time, without inconsistency, to deny that (2) and (3) are synonymous, on the ground that while the individual words of (2) and (3) have the same sense, the logical forms of these statements differ. And if (2) and (3) are not synonymous then it is not disturbing that they may not have the same truth values. Thus Putnam is willing to give up the old belief that synonymous words are interchangeable salva veritate in all non-linguistic statements in order to save his belief

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<sup>1</sup>Ibid., pp. 117-118.

<sup>2</sup>Ibid., p. 118.

<sup>3</sup>Ibid.

that some of the words which seem to have the same meaning really do have the same meaning.

Like Putnam, I would take Mates to be merely arguing that synonymous words are not interchangeable salva veritate in all non-linguistic statements rather than arguing that because no two words are thus interchangeable there are no synonymous words. However, I should like to argue that if Mates is making this latter claim, as some philosophers have taken him to be doing<sup>1</sup>, we have good reason for saying that his argument for this thesis is not satisfactory.

Even if it were the case that no two words are interchangeable salva veritate in all non-linguistic contexts, this would only entail the conclusion that no two words are synonymous if "are synonymous" and "are interchangeable salva veritate in all non-linguistic contexts" have the same meaning. Since the synonymy of these two expressions is certainly not self-evident, and since Mates has not even attempted to argue that the two expressions are synonymous, then, even if one must admit that no words are interchangeable salva veritate one need not, in admitting this, admit that no two words are synonymous. Thus even if one agreed that Mates' argument against interchangeability was valid, one could still maintain that no evidence has been put forward to show that

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<sup>1</sup>As we have seen, Shwayder, Pap, and Sellars have interpreted Mates in this way.

there are no synonymous words.

This same point may be made in a slightly different way. The argument which Mates has been taken to have put forth against the view that there are synonymous words would only be valid if two expressions ("are synonymous" and "are interchangeable without change of truth value in all non-linguistic contexts") are synonymous. If, however, the synonymy of these expressions is assumed one cannot then argue that no two words or expressions are synonymous, for such an argument would involve assuming the truth of a premise that is incompatible with the conclusion one is wishing to establish. Thus even if words are not interchangeable salva veritate, one cannot infer from this that there are no synonymous words.

A very similar comment has been made by Israel Scheffler, who urges<sup>1</sup> that the question whether or not any words are substitutable for each other without change of truth-value in statements in indirect discourse should be kept distinct from the question whether or not there are synonymous words. Thus Scheffler laments the recent tendency to treat an attack on one doctrine as an attack on the other and a defense of one as a defense of the other.

I would conclude that Mates' argument and the interpretations that have been given of it provide no evidence

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<sup>1</sup>Israel Scheffler, "On Synonymy and Indirect Discourse," Philosophy of Science, XXII (1955), p. 39.

that there are no synonymous words, and consequently provide no evidence that there are no non-repetitive analytic statements. Since Goodman's criterion of synonymy and Mates' (alleged) argument from interchangeability have provided the foundation stones for the argument that there are no non-repetitive analytic statements, and since it has been shown that in neither case does this conclusion follow, we may conclude that no good reason has been given for believing that there are no non-repetitive analytic statements.

## CHAPTER IV

### THE EXTENSION OF "ANALYTIC":

#### CAN WE RECOGNIZE ANALYTIC STATEMENTS?

In the last chapter the two main arguments for the view that there are no non-repetitive analytic statements were discussed and found to be unsatisfactory. However, even if it is conceded (as it should be) that we have no grounds for denying the existence of non-repetitive analytic statements, it still may be the case that we can never know whether or not any given non-repetitive statement is analytic. That this is indeed the case has been argued by Quine and White and, in a more qualified form, by Waismann. In this chapter I shall discuss the arguments of Quine, White, and Waismann.

Quine and White both argue that the various ways hitherto suggested of identifying a non-repetitive analytic statement are all unsatisfactory. These criteria fall into two classes: on the one hand are those criteria which do not involve an appeal to synonymy; on the other hand, those that do. I shall first discuss the alleged ways of identifying non-repetitive analytic statements that do not involve an appeal to synonymy.

One of the views White considers is the theory that

"analytic statements are those whose denials are self-contradictory", put forth, this time, not as the meaning of "analytic" but as a criterion for recognizing analytic statements. This view, although expounded by many modern philosophers, was also held by Kant, who asserted that "all analytical judgements depend wholly on the law of contradiction."<sup>1</sup>

According to this view we know that a statement such as "An elm tree is an elm tree" is analytic since to deny it would be to assert "An elm tree is not an elm tree", which is self-contradictory: it amounts to saying that "A is not A". On the other hand, to say "An elm tree is adaptable to the Manitoba climate" is to assert a synthetic statement, for to deny this statement would amount to saying "An elm tree is not adaptable to the Manitoba climate", which, while perhaps false, is not logically self-contradictory.

But what if I assert the allegedly non-repetitive analytic statement: (1) "A bachelor is a man of mature years who has never been married"? Is this analytic? Employing the suggested criterion we should deny this statement, and thus we get: (2) "It is not the case that all bachelors are men of mature years who have never been married"; or (3): "Some

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<sup>1</sup>Immanuel Kant, Prolegomena to Any Future Metaphysics in From Descartes to Kant, eds. T. V. Smith and Marjorie Grene, p. 794.

bachelors are not men of mature years who have never been married". Now we are told that (1) is analytic if, and only if, (2) or (3) is self-contradictory. But is either (2) or (3) self-contradictory? Such statements, White notes, are not syntactically self-contradictory like "A is not A". And if we claim that there may be self-contradictory statements which are not literally of this form how are we to recognize them? It might be said that such statements need only "produce a certain feeling of horror or queerness on the part of people who use the language. They behave as if they had seen someone eat peas with a knife."<sup>1</sup> "Such an approach", White says, "is very plausible and I would be satisfied with an account of horror or queer feelings which people are supposed to have in the presence of the denials of analytic statements. But on this I have a few questions and observations."<sup>2</sup> Just who, he asks, is supposed to feel this horror? Is it to be felt by all the people who use a language, or merely by a select and sophisticated group? Further, how are we to distinguish the horror associated with the denial of firmly believed synthetic statements from that surrounding the denials of analytic statements? Those philosophers who uphold this criterion, he notes, must claim not only that it

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<sup>1</sup>Morton G. White, "The Analytic and the Synthetic: an Untenable Dualism", Semantics and the Philosophy of Language, ed. L. Linsky, p. 281.

<sup>2</sup>Ibid.

sharply separates statements into two classes but also that it does so in a particular way. "It would be quite disconcerting to these philosophers to have the whole of physics or sociology turn out as analytic on their criterion and only a few parts of mathematics."<sup>1</sup> Furthermore, if analytic statements are to be distinguished from synthetic ones according to the discomfort that is produced in denying them, then this distinction will be one of degree; it will be gradual rather than sharp. Thus "the current rigid separation of analytic and synthetic will have been surrendered."<sup>2</sup> For these reasons, White concludes, this suggested criterion of analyticity does not do what those who propose it want it to do: it does not enable us to distinguish in a sharp and clear-cut fashion between those statements we say are analytic and those we say are synthetic.

White also considers the criterion according to which we are justified in asserting that "A man is a rational animal", for example, is analytic because "if we were presented with something which wasn't a rational animal, we would not call it a man." Again, White asks, who are "we"? Furthermore, if the evidence for saying that we would not call such beings

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<sup>1</sup>Ibid.

<sup>2</sup>Ibid.

<sup>3</sup>Ibid.

men is that we do not call such beings men it may also be noted that we do not call featherless bipeds men either, although "Man is a featherless biped" is not said to be analytic.

There are many variants of this criterion, White admits, but notes that they all

depend on the use of the contrary-to-fact conditional: if...were...then...would be... But in appealing to this (or any variety of causal conditional) we are appealing to a notion which is just as much in need of explanation as the notion of analytic itself. To appeal to it, therefore, does not constitute a philosophical advance. Goodman has reported on the lugubrious state of this notion, if there are some who are not fazed by this circumstance. It would be small consolation to reduce "analytic" to the contrary-to-fact conditional, for this is a very sandy foundation right now.<sup>1</sup>

A similar dissatisfaction with this type of alleged solution to the problem of identifying non-repetitive analytic statements has been expressed<sup>2</sup> by Quine, although both Quine and White themselves frequently make contrary-to-fact assertions without giving us any indication that they do not understand perfectly well what they are asserting. Surely the "problem of subjunctive conditionals" is a logical one: it involves such questions as: "How are such statements to be symbolized in the symbolism of Principia Mathematica?"; "How are they to be verified?"; "What is their relation to indicative

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<sup>1</sup>Ibid., p. 284.

<sup>2</sup>W. V. Quine, From a Logical Point of View, p. 64.

statements?", etc. One may admit that all these problems exist, however, without having to admit that we do not understand contrary-to-fact conditional statements or questions. If this is the case then a satisfactory criterion of analyticity could involve the employment of subjunctive conditional statements as long as the application of this criterion only necessitated that the subjunctive conditional questions or assertions be understood and answered rather than put into logical symbolism. Thus, while the criterion of analyticity which White discusses does involve contrary-to-fact conditional statements, it does not seem to me to be on that account unsatisfactory. It does, however, involve other difficulties which he notes.<sup>1</sup> I would thus agree with White that it is not satisfactory, although I do not agree that any criterion of analyticity which is not expressed in purely indicative statements is necessarily unacceptable.

A third criterion of analyticity which White discusses briefly is that of C. I. Lewis. In White's opinion, Lewis would hold that "whether 'All men are rational animals' is analytic in a natural language depends on whether all men are necessarily rational animals, and this in turn depends on whether the criterion in mind of man includes the criterion in mind of rational animal."<sup>2</sup> To find out if this is the

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<sup>1</sup>Morton G. White, op. cit., pp. 282-284.

<sup>2</sup>Ibid., p. 279.

case we are directed by Lewis to make an "experiment in imagination" which, if the statement we are considering is analytic, will show us that we cannot consistently think of a man that is not a rational animal or, alternatively, we will find that our schematism for the application of the term "rational animal" includes our schematism for the application of the term "man".<sup>1</sup> White objects to this proposal on the ground that "inclusion", if meant literally, as he thinks Lewis means it, is "a sense-apprehensible relationship" that is both subjective and intuitionistic; and he does not find "this early retreat to intuition satisfactory".<sup>2</sup>

Several alleged criteria for discovering whether statements in an artificial language are analytic are discussed by Quine and found to be unsatisfactory. For example, he discusses<sup>3</sup> the suggestion that a statement in an artificial language is analytic if and only if it is true according to the semantical rules of that language; he also considers the suggestion which Carnap once made<sup>4</sup> that a statement is analytic if and only if it comes out true under every state

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<sup>1</sup>C. I. Lewis, An Analysis of Knowledge and Evaluation, pp. 151-157.

<sup>2</sup>White, op. cit., p. 280.

<sup>3</sup>W. V. Quine, From a Logical Point of View, pp. 32-37.

<sup>4</sup>Rudolf Carnap, Meaning and Necessity, pp. 9ff.

description. However, since the problem that we are concerned with is that of determining what statements in a natural language are analytic I shall not review Quine's analysis of these theories.

The proposed criteria of analyticity discussed above have all been found to be unsatisfactory. However, there is another way, in addition to that of providing a criterion of analyticity, to silence Quine's and White's criticisms of the synthetic-analytic distinction. Quine and White agree that if they could determine when two expressions have the same meaning they would then have no trouble deciding when a non-repetitive statement is analytic. Consequently, if a workable criterion of synonymy could be given, they would then retract their objections to analyticity for, given a criterion of synonymy, they could then decide whether or not non-repetitive statements such as "A bachelor is a man of mature years who has never been married" are analytic. Now what Quine and White are asking for is not a definition of "synonymy". White admits<sup>1</sup>, in fact, that such a request would be illegitimate, for to ask for a synonym for "synonym" would entail either that one already understood the meaning of "synonymy" or that one did not understand one's request.<sup>2</sup>

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<sup>1</sup>White, op. cit., p. 276.

<sup>2</sup>In places it does seem as if Quine and White are saying that they do not understand the meaning of the word "synonymous". White says that, like Quine, he does not understand this term

What they are asking for is rather a satisfactory criterion of synonymy. What Quine would count as a satisfactory criterion of synonymy is one expressed in behaviouristic terms. White claims that his own request is more modest: what he demands is a "term which is extensionally equivalent to 'synonym'. In other words, a term which bears the relation to 'synonym' that 'featherless biped'<sup>1</sup> is said to bear to man. If such a criterion of synonymy could be provided then Quine and White's objections to analyticity would be silenced; it is because such a criterion has not yet been produced and because all other criteria of analyticity are unsatisfactory that they find the synthetic-analytic distinction unacceptable.

Now of course many criteria of synonymy have been given; the difficulty is that none of these meet the demands of Quine and White. I shall now briefly outline some of the "orthodox" accounts of synonymy and the objections which have been raised against them.

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and does not think that many others who think they do really do either. Now if this is what White really means to say then he is involved in the dilemma outlined above and discussed very clearly and more fully by Taylor (see "Disputes About Synonymy," Philosophical Review, LXIII (1954), pp. 517-529). But in view of the fact that White himself notes the difficulties that such a complaint would entail I shall take him to be asking for a criterion of synonymy rather than a definition of the word "synonymy".

<sup>1</sup>White, op. cit., p. 276.

There is, for example, the view that certain words have the same meaning by definition. This, Quine feels, is inadequate and misleading. To say that "bachelor" means the same as "man of mature years who has never been married" on the ground of an appeal to the nearest dictionary is evasive, for the lexicographer only defines "bachelor" as "man of mature years who has never been married" because he believes there is a relation of synonymy between these linguistic forms. "The relation of synonymy presupposed here has still to be clarified, presumably in terms relating to linguistic behaviour. Certainly the 'definition' which is the lexicographer's report of an observed synonymy cannot be taken as a ground of the synonymy."<sup>1</sup>

Another traditional view is that two predicates have the same meaning if they stand for the same essence or Platonic Idea. But this, Goodman says<sup>2</sup>, is not helpful, for we do not know how to find out whether two terms stand for the same Platonic Idea.

The proposal that two terms have the same meaning if they stand for the same mental idea or image, Goodman considers to be "more practical"; but this suggestion he also objects

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<sup>1</sup>W. V. Quine, From a Logical Point of View, p. 24.

<sup>2</sup>Nelson Goodman, "On Likeness of Meaning," Semantics and the Philosophy of Language, ed. L. Linsky, p. 67.

to on the grounds that "it is not very clear just what we can and cannot imagine"<sup>1</sup>, and that there are some predicates for which there is no corresponding image.

There is also "the theory that two predicates differ in meaning if and only if we can conceive of something that satisfies one but not the other."<sup>2</sup> Regarding this suggestion Goodman points out that, unless we appeal to meaning relationships, which would be clearly circular, there is no limit to what we can conceive of, and so this criterion is no criterion at all.

A narrower criterion is that two terms have different meaning if and only if there is something which satisfies one term but not the other. But, while this might work in many cases, it is not adequate as a general rule. For terms with the same extension, such as "certaur" and "unicorn", or "equilateral triangle" and "equiangular triangle", would then have the same meaning, which is obviously not the case.

Perhaps the best known criterion for testing synonymy is that of interchangeability. As we saw in the last chapter<sup>3</sup>, Pap has defended the old view that synonymous words are interchangeable for each other in all non-linguistic contexts.

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<sup>1</sup>Ibid.

<sup>2</sup>Ibid.

<sup>3</sup>Pp. 79-80 of this study.

Now Pap himself does not go on to defend the view that interchangeability may be regarded as a criterion of synonymy; but it might be argued that if Pap is correct in his contention that synonymous words are interchangeable, then one consequence of this would be the reinstatement of this old criterion of synonymy.

While I am inclined to agree with Pap that (contrary to Mates' belief) synonymous words are substitutable for each other without change of truth value in non-linguistic statements, I do not think that this fact, if it is a fact, will help us in discovering or testing what words are synonymous. According to Pap, if the statement "I believe that Roderick is my brother" is true then the statement "I believe that Roderick is my male sibling" will also be true, whether or not I am aware that it is true, because "brother" and "male sibling" are synonymous and so can be substituted for each other salva veritate. Even if this is the case, however, only if I already know that "brother" and "male sibling" are synonymous will I know that "I believe that Roderick is my male sibling" is true. Thus in order to know whether or not words are interchangeable for each other without change of truth-value in non-linguistic statements I must first know whether or not they are synonymous. And if this is the case then, even if synonymous words are interchangeable for each other, interchangeability cannot be regarded as a criterion

of synonymy.

Another and more elaborate account of synonymy has been suggested by A. J. Ayer in Language, Truth and Logic.

Ayer holds that

two symbols belonging to the same language can be said to be synonymous if, and only if, the simple substitution of one symbol for the other, in any sentence in which either can significantly occur, always yields a new sentence which is equivalent to the old. And we say that two sentences of the same language are equivalent if, and only if, every sentence which is entailed by any given group of sentences in conjunction with one of them is entailed by the same group in conjunction with the other. And in this use of the word "entail", a sentence s is said to entail a sentence t when the proposition expressed by t is deducible from the proposition expressed by s, while a proposition p is said to be deducible from, or to follow from a proposition q, when the denial of p contradicts the assertion of q.<sup>1</sup>

Since Ayer's account of synonymy avoids the use of such terms as "image" and "concept" which White, Goodman and others find objectionable and which are generally admitted to stand in need of clarification, it might at first sight appear to be more satisfactory than the other accounts considered above. And, as well as being precise and clear, Ayer's procedure also seems to be objective: whether or not two symbols are synonymous appears to depend not upon subjective or introspective reports but upon objective logical manipulations. But in spite of these advantages there are

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<sup>1</sup>A. J. Ayer, Language, Truth and Logic, p. 60. My italics.

also several weaknesses in Ayer's account of synonymy, one of which is serious enough to render his account useless.

(i) It is generally believed that one word may have several different senses; Ayer's account, however, makes no allowance for the different possible senses of a given word. According to Ayer, any satisfactory synonym for "bachelor", for example, would have to be substitutable for "bachelor" in the way Ayer describes in any sentence in which "bachelor" can significantly occur and consequently in both the sentences: "Smith received a Bachelor of Arts degree in 1905" and "Smith, now 75, is still a bachelor and will likely never marry." Unless Ayer were to modify his account somewhat so as to distinguish different senses of the same word it is difficult to see how synonyms for any word used in more than one sense would be possible. And, incidentally, Ayer could not distinguish the different senses of a given word in terms of meaning or synonymy for this would be circular.

(ii) One might regard as undersirable any account of synonymy in terms of substitutability in view of the possible limitations of substitutability brought to our attention by Mates.

(iii) Unless Ayer modified his criterion of synonymy in such a way that only sentences which differ from those whose equivalence is being tested could be members of the group of sentences that are conjoined to the sentences whose

equivalence is being tested, he would not preclude the possibility that on his criterion any two sentences whatsoever could be said to be equivalent and that consequently any two words whatsoever could be said to be synonymous.<sup>1</sup>

(iv) While Ayer might conceivably be able to meet the difficulties raised above, another objection to his theory could not as easily be met--namely, that it is circular. Consider the two symbols "oculist" and "eye-doctor" which Ayer offers as synonymous symbols. Now, according to Ayer, if we wish to decide whether these words are synonymous we should begin by doing something like the following: we notice that "oculist" occurs in the sentence (1): "This oculist is a man"; we now substitute "eye-doctor" for "oculist" thus getting (2): "This eye-doctor is a man." Now, if (2) is equivalent to (1) we shall have some evidence for the synonymy of "oculist" and "eye-doctor". But how can we tell if (1) and (2) are equivalent? Well, following Ayer we might say that (1) and (3): "A man is a mortal being" entail, in Ayer's sense of "entail" (4): "This oculist is a mortal being"; now, if (2), in conjunction with (3), also entails (4) then we shall have some evidence for the synonymy of the two symbols "oculist" and "eye-doctor". But how can we know that the conjunction of (2) and (3) entails (4) without first knowing that "oculist"

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<sup>1</sup>This has been pointed out to me by Mr. Roy H. Vincent.

is synonymous with "eye-doctor"? Since I can think of no possible way, and since without knowing this we would have, according to Ayer, no evidence for the synonymy of "oculist" and "eye-doctor" I would conclude that Ayer's account of synonymy is circular and useless.

None of the foregoing suggestions, then, appear to provide satisfactory criteria for analyticity or synonymy. From this Quine and White draw the conclusion that we cannot tell whether or not a non-repetitive statement is analytic. Mates, however, disagrees. While admitting the absence of satisfactory criteria, he denies the Quine-White conclusion. There are, he contends, "'intuitive' notions of analyticity and synonymy".<sup>1</sup> Although these intuitive notions are acknowledged by Mates to be somewhat vague he believes that they are sufficiently clear for us to know in most cases when they apply to a statement or linguistic expression.

Like Mates, Richard Taylor is not willing to concede that the analytic-synthetic distinction needs to be drastically overhauled or reconstructed along pragmatic lines. Rather, he tries to show that Quine and White's request for a criterion of analyticity or synonymy is illegitimate, and being so, obviously cannot be satisfied.

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<sup>1</sup>Benson Mates, "Analytic Sentences," Philosophical Review, LX (1951), p. 532.

Any attempt to state a satisfactory criterion of sameness of meaning or sameness of anything else, argues Taylor, is an attempt to do what is impossible. Accordingly, a request for such a criterion should not be made. "It is impossible", Taylor contends, "ever to explicate the notion of sameness of anything whatever or to supply a criterion for it which is not empty in its appeal to the sameness of something also itself in need of a criterion."<sup>1</sup> If one concedes (as White has) the impossibility of a definition of "same meaning", yet still demands a criterion of sameness of meaning, then, Taylor submits, any criterion that could possibly be offered would appeal to the sameness of something else--e.g., to sameness of truth-value or sameness of behaviour. Consequently, the problem of sameness is merely transferred, not solved. And since, in Taylor's opinion, any alleged criterion of synonymy or analyticity will involve appeal to the sameness of something, he concludes that White and Quine are bound to be dissatisfied with whatever is offered them.

The relevance of Taylor's remarks depends, of course, on just what is taken to be the original difficulty. If White or anyone else were to say that he did not understand the words "same meaning" or even the word "same", but nevertheless

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<sup>1</sup>Richard Taylor, "Disputes About Synonymy," Philosophical Review, LXIII (1954), pp. 522-523.

wanted a criterion of sameness of meaning then Taylor's remarks would indeed be pertinent. However, Taylor seems to assume that one could only ask for such a criterion if one did not understand the words "same meaning" or "same". But this need not be the case. Taylor himself suggests that someone might possess a criterion for distinguishing between A and B yet not understand the terms "A" and "B"<sup>1</sup>; I would suggest that someone might understand the terms "A" and "B" but nevertheless be in doubt regarding whether some given thing was A or B. For example, I do not see why someone might not understand perfectly well the words "same" and "same meaning", and yet, when considering a given pair of words, be in doubt whether they had the same meaning. This is especially obvious when someone who understands the expression "having the same meaning" considers a pair of expressions in a language that is foreign to him: in this situation, in addition to understand the words "same meaning", one also needs some method for deciding whether the foreign expressions being considered have or have not the same meaning. And if this is the case, then, while we can and should grant all that Taylor says about a demand for a criterion being illegitimate when coupled with complaints about not understanding the word "synonymous", we need not grant that a

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<sup>1</sup>Ibid., p. 521.

request for a criterion of synonymy is itself illegitimate. While Taylor has offered sound criticism of the demand which he has taken White to be making it has not been shown that the problem of a criterion of synonymy has vanished, for a request for a criterion of synonymy need not be conjoined with an admission of lack of understanding of the word "same". Thus, even if it is necessary to phrase a criterion of synonymy in such a way that the word "same" occurs in it, it would not follow that such a criterion need on that account be objected to, for it need not be the case that those who request the criterion do not understand the word "same". Thus the fact (if it is a fact) that a criterion of synonymy would appeal to the sameness of something else does not make a request for such a criterion illegitimate. And if this is so, then Taylor's objection to Quine and White's demand for a criterion falls to the ground.

Because of the inadequacy of the suggested criteria of synonymy White and Quine are not content with any criterion of analyticity in terms of synonymy. And because the other suggested criteria of analyticity also do not satisfy them they express grave misgivings about the entire synthetic-analytic distinction.

The reason why a satisfactory criterion of analyticity or synonymy has not been given, White feels, is not because philosophers have been lax in their attempts to formulate

such a criterion, but rather because they have been working on false assumptions. What White questions are the very beliefs which have led to their search.

What are these assumptions? It has been generally thought that there is a sharp difference between saying "Bachelors are men" and saying "Bachelors are neat": being a man is said to be part of the very meaning of "bachelor" whereas being neat is not. The former statement is held to be quite different from the latter: it is non-repetitive but analytic and necessary while the latter is true but synthetic and contingent. And this distinction between analytic and synthetic statements has been held to be rigid and sharp: if someone were to say that one statement is more nearly synthetic or less nearly synthetic than another he would be taken to be saying something very queer indeed.

But these are assumptions Quine and White are willing to dispense with. "All considerations", White says, "point to the need of dropping the myth of a sharp distinction between essential and accidental predication (to use the language of the older Aristotelians) as well as its contemporary formulation--the sharp distinction between analytic and synthetic." If we do so then "analytic philosophy will no longer be sharply separated from science and an unbridgeable chasm will no longer divide those who see meanings or essences

and those who collect facts."<sup>1</sup> In a more recent publication White laments the "sharp and untenable dualism between reason and experience...enshrined in the distinction between analytic and synthetic statements".<sup>2</sup> A similar view is expressed by Quine, who refers to the belief that there is a fundamental cleavage between truths which are analytic and truths which are synthetic as "an ill-founded dogma".<sup>3</sup>

Now Quine and White are not arguing that the synthetic-analytic distinction should be dropped completely<sup>4</sup> or "that a criterion of analyticity and synonymy can never be given." Rather, they are arguing that "none has been given and, more positively, that a suitable criterion is likely to make the distinction between analytic and synthetic a matter of degree."<sup>5</sup>

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<sup>1</sup>White, op. cit., p. 286.

<sup>2</sup>Morton G. White, Age of Analysis, p. 239.

<sup>3</sup>W. V. Quine, From a Logical Point of View, p. 20.

<sup>4</sup>In some places Quine does seem to be saying that he would like to dispense with the synthetic-analytic distinction completely. For example, he says that "a boundary between analytic and synthetic statements simply has not been drawn. That there is such a distinction to be drawn at all is an un-empirical dogma of empiricists, a metaphysical article of faith" (From a Logical Point of View, p. 37.). I find this remark of Quine puzzling. For, if he does not believe that there is any distinction whatsoever between synthetic and analytic statements, I do not see how he could believe that the distinction is one of degree or one that should be made along pragmatic lines. Perhaps Quine would only wish to deny a rigid distinction between synthetic and analytic statements.

<sup>5</sup>Morton G. White, "The Analytic and the Synthetic: an Untenable Dualism," Semantics and the Philosophy of Language, ed. L. Linsky, p. 286.

In espousing a fluid distinction between analytic and synthetic truths both Quine and White feel themselves "drawn toward pragmatism". It is not the case, Quine argues, that on the one hand there are analytic statements, which hold come what may, and on the other hand synthetic statements which hold contingently on experience. We are told on the contrary that "any statement can be held true come what may... Conversely... no statement is immune to revisions."<sup>1</sup> Quine then goes on to urge that the factors which govern our decision to regard a statement as analytic or synthetic should be pragmatic, although conservatism and the quest for simplicity will enter into such choices.<sup>2</sup> Quine is motivated in part by a desire "to urge the adoption of the epistemological thesis that no statement (at any rate no statement other than one which is either itself a truth of logic or immediately reducible to a truth of logic) can be validated wholly independently of experience... [He] wants to banish this unempirical dogma in the interests of an improved empiricism of the pragmatic variety."<sup>3</sup> Approval of Quine's pragmatic

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<sup>1</sup>W. V. Quine, From a Logical Point of View, p. 43. One might wonder if Quine would admit that this statement of his is not immune to revisions.

<sup>2</sup>Ibid., p. 46.

<sup>3</sup>W. H. Walsh, "Analytic/Synthetic," Proceedings of the Aristotelian Society, LIV (1953-1954), p. 78.

recommendation has been expressed by White, who says that he would welcome the enthronement of a radical gradualistic pragmatism in place of a rigid synthetic-analytic distinction."<sup>1</sup>

These few positive remarks of Quine and White regarding a reconstruction of the synthetic-analytic distinction are, as far as I am aware, all that they have said on this topic in their published articles. Perhaps it is because of the brevity of their remarks that several questions still seem in need of being answered.

(i) Both Quine and White indicated acceptance of the definition of "analytic" which we finally arrived at in Chapter II. In fact it was Quine who most strongly proposed this definition. Now, according to this definition, to say that a statement is analytic is to say that it is a logical truth or that it is reducible to one by substituting synonym for synonym in the original statement. However, it would seem that a statement either is or is not reducible to a logical truth and that hence, given this definition, a statement either is or is not analytic. It may of course be the case (which I do not admit) that what words we take to be synonymous should be decided on pragmatic grounds, but even so, while it would then perhaps be arbitrary or relative to a group or to one's

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<sup>1</sup>Morton G. White, "The Analytic and the Synthetic: an Untenable Dualism," Semantics and the Philosophy of Language, ed. L. Linsky, p. 282.

purpose whether or not a statement is analytic, it would still not make the distinction one of degree. We would still not say that one statement is "more analytic" or "less analytic" than another, nor would we say that "analytic statements are just like synthetic statements only that they produce a little more of a certain quality."<sup>1</sup> How, then, do Quine and White reconcile what they say about the definition of "analytic" with what they say about the synthetic-analytic distinction being one of degree?

(ii) Since Quine and White indicate satisfaction with the definition of "analytic" arrived at in Chapter II, and since they both go on to cast doubt on all suggested criteria of synonymy and, indeed, on the very ground that we can know that one expression, such as "brother", means the same as another, such as "male sibling", what do they think they have proposed in proposing this definition of "analytic"? Surely this definition would be very curious indeed if it did not state an expression which is synonymous with "analytic"; yet according to Quine and White's position we at present have no way of justifying a statement that one expression is synonymous with another. In proposing their definition of "analytic" are Quine and White then making a claim about the meaning of "analytic" which they acknowledge they cannot support; or do

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<sup>1</sup>Ibid.

they believe their definition of "analytic" tells us not the meaning of "analytic" but something else?

Let us now consider the comments contemporary philosophers have made of Quine and White's proposed reconstruction of the synthetic-analytic distinction. While in the main those who have commented on Quine and White's remarks have concentrated on trying to find a workable criterion of analyticity or synonymy in order to render unnecessary the pragmatic approach to analyticity, a few other philosophers have attacked Quine and White's positive proposals regarding analyticity.

One such philosopher is P. F. Strawson. "It is one thing", Strawson says, "to admit that there is no absolute necessity about the adoption or use of a conceptual scheme; and quite another to say that there are no necessities within a conceptual scheme we adopt or use."<sup>1</sup> Strawson seems to be suggesting that this distinction is one which Quine has overlooked. I take Strawson to be arguing that we are at least to some extent free to adopt one of a number of alternative conceptual schemes. For example, although we could adopt a conceptual scheme such that the concepts "bachelor", "man", and "neat", say, would be related in a certain particular

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<sup>1</sup>P. F. Strawson, "A Logician's Landscape," Philosophy, XXX (1955), p. 231.

way, we can adopt instead another conceptual scheme such that the concepts "bachelor", "man" and "unmarried", while related to one another, are not related to the concept "neat". But although we are free to choose between alternative conceptual systems this does not mean that once we have adopted a particular conceptual system we are then free from all conceptual restrictions. Strawson seems to be suggesting that while pragmatic considerations may be relevant to our adoption of a conceptual system, it still may be the case that our choice, whatever it is, commits us to certain necessities. Strawson admits that even given a conceptual system, revisions may still be made, especially in areas of the system which are highly abstract. He maintains nevertheless that, in some areas at least, the conceptual element will be so clear that conceptual statements will be easily distinguished from those that are factual, and that hence statements which are analytic will be distinguishable from those that are synthetic. And if this is correct then, while pragmatic considerations may indeed be relevant to our choice of a conceptual system, they would not rule out a rigid synthetic-analytic distinction.

A closely related point could be expressed without involving us in the concept terminology which Quine and White find so objectionable. Given any statement "p" then, as White admits, the statement "'p' is analytic" is itself empirical.

But if this is the case then, while we may have difficulty discovering what statements are analytic and while we can only at most expect to establish a high degree of probability in favour of the assertion that some particular statement is analytic, it still does not follow from this that analyticity itself is just a matter of degree. Consider this example. A person who knew very little algebra might have considerable difficulty deciding whether or not some highly complex algebraical formula is true. In fact the only way in which he might be able to go about discovering whether or not this formula is true would be to take the consensus of opinion of his mathematically minded friends. But if he found that seven of these acquaintances said that the formula is true and three said it is false then, while he might say that the probability of the statement's being true is about  $7/10$ , he would not say that its truth is a matter of degree. And if he had no way of deciding whether or not it is true he would not say that its truth-value is just a matter of choice. Similarly we may have difficulty deciding whether or not statements are analytic or words are synonymous but this does not make synonymy or analyticity a matter of choice or degree. Thus, while Quine and White have perhaps clearly indicated how unsatisfactory are our criteria for recognizing analytic statements and synonymous words, such a demonstration is quite compatible with a rigid and non-pragmatic distinction between

analytic and synthetic statements and between synonymous and non-synonymous words.

Walsh has noted that "difficult as it may be in any particular case to tell whether a statement is intended to be analytic or not, the fact remains that it is always appropriate to ask the speaker to make up his mind on the point." And the speaker's behaviour and attitude to what he has said will vary considerably according to what decision he comes to. This significant difference in one's behaviour and attitude to a statement that is analytic and one that is synthetic seems to me to constitute additional empirical evidence that the synthetic-analytic distinction is one of kind rather than one of degree, for if the difference were only one of degree it would seem that on at least some occasions the difference between a statement regarded as synthetic and the same one regarded as analytic would be slight.

And a hearer's response to a statement which he takes to be analytic seems different in kind from his response to one which he takes to be synthetic. When we are told that a statement is synthetic we are prepared for confirming or disconfirming evidence; we at least consider such evidence relevant. We would often on reflection not be prepared to bank on a synthetic statement completely. But we hold none of

these attitudes to a statement which we regard as being analytic. Such a statement we regard as admitting no counter-evidence; we rely on it completely. This difference is implicitly admitted by Quine inasmuch as he laments the fact that analytic statements are considered true independently of experience. Now, if the distinction between analytic and synthetic statements is only one of degree, if analytic statements have only a bit more of a certain quality than synthetic statements have, then why is our attitude to statements we are told to be synthetic so different from our attitude to those we are told to be analytic?

These questions which have been raised about Quine and White's position and the criticisms which have been made of it are ones to which Quine and White have not yet replied. Although these questions and criticisms should be borne in mind when one is evaluating the views of Quine and White, it should not be forgotten that their request for a criterion of synonymy or analyticity and their contention that no satisfactory criterion has yet been advanced, are independent of whether or not their proposed reconstruction of the synthetic-analytic distinction is satisfactory. And it should also be remembered that this reconstruction was suggested only because of the alleged fact that no workable criterion is available; if a satisfactory criterion of analyticity or synonymy can be given then an alternative will be provided

to their gradualistic and pragmatic account of analyticity. Thus the need for finding a workable criterion of synonymy or analyticity remains. This need has been recognized by several philosophers and attempts have been made to meet it.

Before going on to discuss these attempts, I should first like to discuss Waismann's comments on the synthetic-analytic distinction, for Waismann's difficulties with this distinction, like those of Quine and White, would also be met if a workable criterion of synonymy could be produced; and, like Quine and White, Waismann believes that there is no sharp distinction between analytic and synthetic statements.

It will be recalled that the definition which we finally arrived at of "analytic" is one which is in substantial agreement with that proposed by Waismann. Now Waismann's main doubt about analyticity is related to this definition. He argues that "if the terms in the definition of 'analytic' were precisely bounded concepts, the same would hold of 'analytic'; if, on the other hand, they should turn out to be ambiguous, blurred or indeterminate, this would affect the concept of analytic with exactly the same degree of indeterminacy."<sup>1</sup> It is because Waismann argues that the terms in the definition are both ambiguous and vague that he concludes

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<sup>1</sup>Friedrich Waismann, "Analytic-Synthetic," Analysis, part II, XI (1950-1951), p. 25.

that the concept of analyticity is itself indeterminate.

The term in the definition of "analytic" which Waismann finds most ambiguous and blurred is the term "definition" itself. Waismann argues that "definition" is used in many senses. In one sense of "definition" a definition is "a licence which permits us to replace a word, or a symbol, by the definiens, i.e., to translate an expression into a different idiom. When we say this sort of thing what we have in mind are perhaps explicit definitions per genus et differentiam."<sup>1</sup> But many definitions do not conform to this archetype. Of many terms we are not able to give explicit definitions and so we give instead other kinds of definition: definitions in use, dictionary definitions, recursive definitions and ostensive definitions. But these definitions spread into more and more complicated patterns and eventually into things which are not definitions at all. Hence there is no sharp dividing line between things which are definitions and things which are not. Dictionary definitions are, according to Waismann, a good example of this point, for if they are admitted then he believes that we can show almost any statement to be analytic. Such statements as "Emma Albani was a Canadian soprano" or "There are nine grades of mandarins" might "with some justice be claimed to be analytic since they

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<sup>1</sup>Ibid.

could be learnt from merely looking up dictionaries."<sup>1</sup> Thus, because the word "definition" is vague and refers to so many kinds of statements the distinction between those statements which are analytic and those which are synthetic is said to be arbitrary. As Waismann puts it: "In forming a concept like 'definition' we are grouping together a cluster of unequal things, held together by a sort of family likeness. It is important to note that this family likeness is itself of a vague kind consisting of all sorts of similarities which need have nothing in common."<sup>2</sup> He goes on to argue that "any inexactitude in the idea of definition will be reflected in a similar inexactitude in the conception of analytic: according as the boundary of what is called definition is drawn more broadly or more narrowly, the class of expressions to be included in the range of analytic will become larger or smaller."<sup>3</sup> Hence it is not the case that one can sharply separate statements into two classes, those that are analytic and those that are synthetic, for what is analytic given one sense of "definition" may be synthetic given another, and consequently the synthetic-analytic distinction is vague. Here,

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<sup>1</sup>Ibid., p. 30.

<sup>2</sup>Friedrich Waismann, "Analytic-Synthetic," Analysis, part III, XI (1950-1951), p. 49.

<sup>3</sup>Ibid., pp. 49-50.

by means of a different argument, Waismann has reached the same conclusion as that of Quine and White.

Such a conclusion, however, does not seem to me to be necessitated. If, as Waismann claims, the term "definition" is used to refer to many quite different kinds of things, I do not see why we cannot simply admit that it is ambiguous and state precisely in what sense this term is being used in our definition of "analytic". If this could be done then the definition of "analytic", while employing the allegedly ambiguous term "definition", would not itself be ambiguous.

It seems perfectly obvious that the term "definition", as it occurs in the definition of "analytic", is being used in the sense of explicit definition, for only this kind of definition tells us that one expression is synonymous with another and, if the definition of "analytic" did not involve reference to the synonymy of words or expressions, then the alleged fact that we cannot recognize synonymous words would not constitute a problem for those who want to say that there are analytic statements. And since the expression "explicit definition" is not vague or ambiguous then the synthetic-analytic distinction, while involving appeal to explicit definitions, would not on that account be vague or ambiguous.

Now it seems to me that in some sense of the expression "dictionary definition", dictionary definitions, too, might

be relevant to analyticity. If we examine "dictionaries" I believe we shall find that in addition to containing statements like "Ukuleles became popular in Hawaii about 1877"; or "Most species of octopus are rather small and, usually, timid and inoffensive"; dictionaries also tell us that "brother" and "male sibling" are synonymous and that "triangle" means plane figure bounded by three straight lines. Now Waismann seems to mean by "dictionary definition" any statement which can be found in a dictionary. If this is what is meant by "dictionary definition" then I think that it is correct to hold that dictionary definitions are not related to analyticity. I would suggest, however, that it is much more in accord with common usage to define "dictionary definition" as an explicit definition recorded in a dictionary. If this definition of "dictionary definition" is accepted, then "'Brother' means male sibling" may be said to be a dictionary definition, whereas "Ukuleles became popular in Hawaii about 1877", while in a dictionary, could not be called a dictionary definition. Dictionary definitions, given this definition, would just be a subclass of explicit definitions and so would be related to analyticity; but although so related would not make the synthetic-analytic distinction one of degree.

I would thus agree with Waismann that "definition" is used in a variety of ways, some of which are perhaps misleading.

This fact, however, need not render the synthetic-analytic distinction arbitrary for, while such kinds of definitions as dictionary definitions (in Waismann's sense of this term) do not sharply and non-arbitrarily differ from statements which are not called definitions, explicit definitions do differ sharply and precisely from all other kinds of statement. And if this is so and if only explicit definitions are relevant to analyticity then in so far as the synthetic-analytic distinction involves appeal to explicit definitions it will not on that account be vague or arbitrary.

In addition to this difficulty, Waismann finds two other problems involved in the synthetic-analytic distinction. He discusses at great length the difficulty of determining whether certain statements, such as "I see with my eyes" or "Time is measureable" are necessary or contingent. He gives strong arguments for believing them to be necessary and then equally strong arguments for believing them to be contingent. Now Waismann does not explicitly relate these remarks to the synthetic-analytic distinction but he seems to me to be arguing that because we cannot always tell whether a statement is necessary or contingent, the line between synthetic and analytic statements is blurred. However, since it has been shown before<sup>1</sup> that the analytic-synthetic dichotomy is

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<sup>1</sup>Vide, pp. 30-31 of this study.

not intensionally equivalent to the necessary-contingent dichotomy (and accordingly may not even be extensionally equivalent to it) then, even if it is the case that we cannot tell whether some statement is necessary or contingent, this does not mean that we cannot tell whether it is analytic or synthetic. Thus this alleged objection to the synthetic-analytic distinction does not seem to be relevant.

Waismann's third objection to the synthetic-analytic distinction is based on the vagueness of ordinary language. In putting forth this objection Waismann seems to be using "definition" in the sense of "explicit definition" inasmuch as he argues that the words of which we might attempt to give explicit definitions are too vague to admit of successful definition. The very idea of a word such as "time" having one precise meaning is, according to Waismann, mistaken. Not only do certain words have a great variety of meanings, but, as Waismann also points out, their meaning develops and changes, for "language is a living, growing thing which adapts itself to new situations. Words which haven't changed for centuries are the conservative elements in a language but where we come to look at things in new ways a word may acquire new values and meanings."<sup>1</sup> Because of these facts, Waismann

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<sup>1</sup>Friedrich Waismann, "Analytic-Synthetic," Analysis, part IV, XI (1950-1951), p. 124.

seems to conclude that the belief that one can give a precise definition of a word is erroneous and consequently that we cannot say definitely of any given statement whether it is analytic or synthetic.

Now I would be quite willing to admit that many (and perhaps most) words are ambiguous and also that the meanings of words change from time to time, but I do not believe that such admissions entail the further admission that a word cannot be precisely defined. If a word (such as the word "fair") is used in a number of senses then in defining this word one must specify just what sense of the word the definition is alleged to cover. Or if we suspect that a word is used in different senses by different people or groups of people we should indicate that our definition is intended to cover only a certain person or group. If this is done I do not see how the other possible senses of the word being defined in any way cast doubt upon the definition being given. And while it may be the case that the meaning of the word being defined will change in the future, in putting forth a definition one is not claiming that a given word will have such-and-such a meaning for all time, but only that it has this meaning now. If this is the case then, even though words are ambiguous and change their meaning from time to time, this will not prevent us from stating what their meaning is under certain specified

conditions. And while the same words may be used to make a synthetic statement in some contexts and an analytic one in others "this does not show that any particular statement is on any particular occasion analytic and synthetic at once"<sup>1</sup> or that analyticity is a matter of degree, but only that at least one of the words occurring in the statement is being used in two quite different senses. Hence if we make appropriate stipulations about time and context and perhaps even speaker when we assert that a statement is analytic then I do not see why such an assertion will not be quite clearly understood, and understood to be a claim that is quite different in kind from the claim that the same statement is synthetic.

Thus I would conclude that Waismann has given us no good reason for believing that we cannot say that two given expressions have precisely the same meaning or for believing that the synthetic-analytic distinction is blurred or indeterminate. However, it should not be forgotten that as yet no way of justifying or testing such claims has been found. And until a criterion of analyticity or synonymy is forthcoming the objections to a rigid distinction between synonymous and non-synonymous words and between analytic and synthetic

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<sup>1</sup>Walsh, op. cit., p. 86.

statements will not likely be silenced. Accordingly, in the next chapter I shall go on to consider the criteria of analyticity and synonymy that have been suggested by the defenders of the synthetic-analytic distinction as a result of the criticisms of this distinction made by Quine, White, and Waismann.

## CHAPTER V

### THE EXTENSION OF "ANALYTIC": ALLEGED CRITERIA OF ANALYTICITY

In order to meet the demands of Quine and White for a workable criterion of analyticity and thus circumvent their objections to a sharp synthetic-analytic distinction, several philosophers have come forth with proposals for testing the synonymy of words. If one of these methods for testing synonymous expressions were to prove satisfactory we could then easily test analyticity in terms of synonymy and thus meet the main objection that has been raised against the synthetic-analytic distinction. In this chapter I turn to consider several criteria of synonymy suggested with this aim in mind.

One such criterion of synonymy has been suggested by Moreland Perkins and Irving Singer, who have put forth what they consider to be a behaviouristic and scientific method for deciding upon the synonymy of two expressions. Perkins and Singer advise us that one should begin by considering the synonymy of two words for a particular person over a limited period of time. We begin by asking whether two words "M" and "N" have the same meaning for A at time T. We are told that "M" and "N" have the same meaning for A at time T if, when "N" is substituted for "M" in statement "P" the resulting statement "Q" is synonymous with "P". However, "we are now faced

with the problem of explaining when two statements are synonymous."<sup>1</sup>

Now "two statements are to be understood as synonymous for person A at time T if his testing procedures are the same for the two statements."<sup>2</sup> It is explained that by "testing procedure" is not meant verification process but any tests, (including, of course, verifying tests) related to A's acceptance or rejection of "P" and "Q".<sup>3</sup> Furthermore, nothing has been said about what the meaning of "P" and "Q" is but only about the relation of synonymy between "P" and "Q". These two facts should be sufficient to show that while this criterion is compatible with the verification theory of meaning, it does not entail it.

Let us suppose that we are trying to decide whether "rational animal" is synonymous with "featherless biped" for A at time T. Following Perkins and Singer's criterion we should assert a statement containing "rational animal", for example, "This is a rational animal"; indicate some creature; ask A to test this statement, and observe his testing procedure. We then do the same for the statement "This is a featherless

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<sup>1</sup>Moreland Perkins and Irving Singer, "Analyticity," Journal of Philosophy, XLVIII (1951), p. 490.

<sup>2</sup>Ibid., pp. 490-491.

<sup>3</sup>Ibid., p. 491.

biped". After the utterance of the first statement A may attempt to administer intelligence tests on the creature indicated; after utterance of the second statement he may examine the creature's skin and legs. If, however, A's testing procedure is the same for both these statements we may conclude that the two statements are synonymous for A.

Now our conclusion about the synonymy of "P" and "Q" is itself an inference drawn from a scientific test--our testing of the sameness of A's test procedures of "P" and "Q". Perkins and Singer caution us that, like the conclusion drawn from any other scientific experiment, this conclusion can at best only be highly probable, while the degree of its probability will depend on the care we take in our testing of A. Certain precautions must then be taken and certain dangers must be avoided if our work is to be of any value. One such danger we are warned about is that following the utterance of, say, "P", A may do something which is not really related to his testing of "P"; he may, for example, develop a cramp in one leg and begin hopping about or he may finger some material he is presented with just because he admires its texture. We might then feel that our testing of A's test procedures would lead to inaccurate conclusions regarding the synonymy of "P" and "Q". But, they claim, these difficulties are no greater than those any scientific

experiment is subject to. The danger of these irrelevant variables can be avoided by repeated testing under various conditions. On the basis of results of tests after several variations in environment we can predict what A's response will be under further variations of conditions. If these predictions are confirmed and A's testing behaviour of both statements remains the same then we may say with a high degree of probability that the two statements are synonymous for A at time T.

Now if the statements "P" and "Q" are synonymous for A at time T then, according to the suggested criterion of synonymy, the words "M" and "N" are synonymous for A at time T. And by extending the range of tests made to show whether "M" and "N" are synonymous for A at time T and by following recognized methods of statistical sampling and inductive generalization we can show whether or not "M" and "N" are synonymous for A in all contexts at all times and whether or not they are synonymous for all people in our society at all times. As the scope of the conclusion we are wishing to establish is increased, its probability is of course decreased, but this puts conclusions regarding synonymy on no wobblier a foundation than those of psychology or physics, and so is no cause for alarm. Theoretically, then, it does not seem impossible to show whether or not two words "M" and "N" are synonymous for any given person or even for any given society

and consequently, given Quine's definition of "analytic", it could be shown whether or not statements are analytic for a person or for a society. Perkins and Singer remark that "the chief obstacle to testing statements about analyticity for a society would not be theoretical untestability, or even technical untestability, but rather lack of motivation for the enquiry."<sup>1</sup>

However, it is only because Perkins and Singer believe that they have provided a workable criterion of sameness of meaning that they are optimistic about the possibility of showing a statement to be analytic. Their criterion of synonymy, however, has not gone unchallenged. It will be recalled that in the last chapter Richard Taylor's argument was considered, according to which no criterion of synonymy which appealed to the notion of sameness of anything whatsoever was said to be acceptable. Taylor explicitly applies his contention to Perkins and Singer's suggested criterion of synonymy. Their criterion, he says<sup>2</sup>, is an example of an alleged criterion which does not meet the original difficulty because it involves the notion of sameness of testing procedure. However, since it was argued in the last chapter that Taylor's

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<sup>1</sup>Ibid., p. 495.

<sup>2</sup>Taylor, op. cit., p. 526, footnote 13.

point was not valid we can now apply the conclusion we came to then to Singer and Perkins' criterion of synonymy and say that, while it does involve the notion of sameness, it is not on that account unsatisfactory.

Nevertheless, for other reasons Perkins and Singer's criterion is unsatisfactory. Let us suppose that we were testing whether A meant by "equilateral triangle" what he meant by "equiangular triangle". Might it not be the case that these words do not mean the same for A, but that A knows that equiangular triangles are always and necessarily equilateral, also accordingly knows that to discover whether or not a triangle is equiangular all he need do is to test whether or not it is equilateral? And might it not also be the case that A preferred to use a ruler than to use a protractor and so always tested equiangularity of triangles by measuring the sides of triangles? If so then it might be the case that A's test procedures for "This is an equiangular triangle" would always be identical to his test procedures for "This is an equilateral triangle", even though "equiangular triangle" and "equilateral triangle" do not, by hypothesis, mean the same for A. Perkins and Singer admit that where the extensions of two words are the same yet their intensions are different, A may have by induction learned to make short-cut tests which are the same for both terms; but they maintain

that if A were required to achieve a higher probability for his statements differences in his testing procedures for these two statements would emerge.<sup>1</sup> In this particular case, however, no differences need ever emerge, for the demand for more exact testing of the truth of the statement "This is an equiangular triangle" can be met just as well by more careful measurements with more exact rulers as it can by more careful measurement with more accurate protractors. Thus, contrary to what Singer and Perkins tell us, it would seem that two words could differ in meaning yet nevertheless the corresponding statements containing the two words could be both tested in exactly the same way.

From the above argument I think it can also be shown that Perkins and Singer's criterion is necessarily false on the ground that it entails a false statement. On their theory two statements are synonymous if the testing procedures for these two statements are the same. Now consider the two statements: (1) "The two statements 'B' and 'C' are synonymous"; and (2) "The testing procedures for statements 'B' and 'C' are the same." Statements (1) and (2), we are told, will only differ in meaning if the testing procedures for their truth are different. However, given the truth of Perkins and Singer's theory, statement (1) would be tested in the way

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<sup>1</sup>Perkins and Singer, op. cit., p. 492.

statement (2) would be tested and thus, on this theory, (1) and (2) would be synonymous. But "B" might be "This is an equilateral triangle" and "C" might be "This is an equiangular triangle". As shown above, while "B" and "C" may not have the same meaning, they may be tested in the same way. Thus (2) may be true when (1) is false, and so, since (1) and (2) may not even have the same truth values, they cannot be said to be synonymous. But Perkins and Singer's theory has been shown to imply that (1) and (2) are synonymous and so to imply a false statement. Since it is a well known truth of logic that a true proposition can only imply true propositions, and since Perkins and Singer's theory implies a false proposition, it may be concluded that their theory cannot be true and so ought not to be accepted.

A more recent attempt to overthrow the Quine-White position has been made by Carnap. Carnap says that "two expressions are synonymous in the language L for X at time T if they have the same intension in L for X at T."<sup>1</sup> Now this account of synonymy, even if established, would only satisfy Quine and White if an account were given of sameness of intension such that one might test behaviouristically, or at least operationally, whether or not two given words had the same intension in L for X at T. This is, in fact, provided

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<sup>1</sup>Rudolf Carnap, "Meaning and Synonymy in Natural Languages," Philosophical Studies, VI (1955), p. 42.

by Carnap, for Carnap outlines a procedure whereby, he claims, one can test in a behaviouristic way any hypothesis regarding the intension of a given word and whereby one can decide between two rival hypotheses. For example, Carnap thinks he can describe a scientific method such that we can tell whether the intension of "man" is rational animal or featherless biped or something else again. This procedure will now be outlined.

Carnap begins by telling us how to determine the extension of a given word for a given person at a particular time. To discover the extension of the word "bachelor", say, for Jones at time T one would present Jones with a large number of things and observe his responses. In this way one could discover (1) those things to which Jones was willing to apply the predicate "bachelor"; (2) those things to which he would deny the predicate "bachelor"; (3) those things for which he was not willing either to affirm or deny the predicate. (1) would constitute the extension of "bachelor" for Jones at time T, (2) would constitute the extensions of its contradictory, and (3) would indicate the vagueness of the intension of the word being considered.

For practical purposes one would only present Jones with a small number of things and from his reactions to these things form a hypothesis about his reaction to things not presented. Although this hypothesis might then only be

partially verified it is in principle possible to verify it completely. Hence the consequence that any actual statement about the extension of "bachelor" for Jones at time T is only probable should not be objected to.

Given the extension of "bachelor" for Jones at time T, how do we go about determining its intension? Or, if several rival hypotheses are put forward regarding the intension of this word such that each suggestion exactly conforms to the established extension, how do we discover which of the hypotheses, if any, is correct? Carnap says that such rival hypotheses are empirical hypotheses which "can be tested by observation of language behaviour."<sup>1</sup> Such testing requires the consideration of possible rather than just actual cases (by "case" Carnap says<sup>2</sup> he means kind of object). For example, suppose it were established that the extension of the word "bachelor" was a number of things all of which were men who were exactly six feet tall and all of which were men of mature years who had never been married; and let us also suppose that there were no men six feet tall and no men of mature years who had never been married who were not part of the extension of "bachelor". In such a case at least two rival hypotheses about the intension of "bachelor" for Jones

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<sup>1</sup>Ibid., p. 37.

<sup>2</sup>Ibid., p. 46, footnote 5.

at time T might be advanced: someone might say that the intension of "bachelor" for Jones at time T was "man six feet tall" while someone else might say it was "man of mature years who had never been married". Carnap would test these hypotheses by asking Jones contrary-to-fact conditional questions (e.g. "Would you call someone a bachelor if he were a man of mature years who had never been married and if he were not six feet tall?") or by pointing to something (e.g. a man who was six feet tall, who was of mature years and who had never been married) and suggesting modifications (e.g. in height) or by inquiring about a kind of object whose existence was left open (e.g. "If something is a man, is only five feet tall, is of mature years and has never been married, is he a bachelor?"). Jones' answers to such inquiries would constitute evidence for or against the rival hypotheses. In this way hypotheses concerning intensions could be tested and could be shown to be probable, improbable, or false. Carnap sums up his theory by saying that the "general concept of intension may be characterized roughly as follows, leaving subtleties aside: the intension of a predicate 'Q' for a speaker X is the general condition which an object Y must fulfill in order for X to be willing to ascribe the predicate 'Q' to Y."<sup>1</sup>

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<sup>1</sup>Ibid., p. 42.

Carnap's theory has recently been criticized by R. M. Chisholm. Chisholm points out that Carnap's exposition of intension does not take into account the possibility that the person whose responses are being considered may be mistaken about what is presented to him and consequently may be willing to apply the predicate "Q" to something to which he would not be willing to apply it were he not mistaken. For example, Jones may be willing to ascribe the predicate "bachelor" to an object Y if he believes that Y is a man of mature years who has never been married when in fact Y is a man of mature years who, unknown to Jones, has been married and divorced three times. If this were ever to happen then, given Carnap's unmodified analysis of intension, we could not say that the intension of "bachelor" for Jones at time T is "man of mature years who had never been married"; such a hypothesis would in fact be ruled out by Jones' response on being presented with Y.

Chisholm suggests several ways in which Carnap might modify his account of intension so as to avoid this difficulty but contends that each of these modifications involves certain difficulties. What Chisholm considers to be the preferable reformulation is the following: "The intension of a predicate 'Q' for a speaker X is the general condition which X must believe an object Y to fulfill in order for X to

be willing to ascribe the predicate 'Q' to Y."<sup>1</sup>

Carnap, in response to Chisholm's criticism, says<sup>2</sup> that he was aware of the inadequacies of his analysis as previously presented and did not intend it to be taken as an exact explication of the concept of intension. Because of the possibility of the subject X being mistaken about the presented object Y Carnap is willing to accept Chisholm's modification in terms of belief of his original analysis.

As Chisholm points out, one disadvantage of his account is that if "intension" is thus defined in terms of "believe" then "believe" cannot in turn be defined in terms of "intension". It might also be added that if "intension" is defined in the way Chisholm has suggested then it will still have to be shown how we can know what the intension of "Q" is for X, i.e., how we can know what conditions X must believe Y to fulfill when he applies "Q" to Y. If the chief advantage of Carnap's formulation, at least from Quine and White's point of view, was that it (allegedly) made intension testable in empirical and behaviouristic terms, it is not immediately apparent that this reformulation has the same advantage.

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<sup>1</sup>Roderick M. Chisholm, "A Note on Carnap's Meaning Analysis," Philosophical Studies, VI (1955), n. 89.

<sup>2</sup>Rudolf Carnap, "On Some Concepts of Pragmatics," Philosophical Studies, VI (1955), pp. 89-90.

Apart from these difficulties other objections might be raised such as to render Chisholm and Carnap's account either mistaken or subject to further restrictions, for there is at least one group of words whose intension (in the normal sense of "intension") for X at time T is not the conditions X must believe something to fulfill in order for him to be willing to ascribe one of these words to that thing.

This is the class of normative words. The normative word "Q" is one which X is willing to apply to an object Y whenever X believes Y to fulfill certain conditions specified in a standard(s) S. But these conditions cannot be what is meant by "Q", or else those with different normative standards, e.g., the Nietzschean moralist and the Christian moralist, or the conservative esthete and the "progressive" esthete, would not really be making incompatible normative statements but instead would be using words which had the same appearance (e.g., "right", "beautiful") in different senses. If "right" meant for the Nietzschean those conditions which he must believe something to fulfill in order for him to be willing to ascribe "right" to it, and if "right" meant for the Christian the conditions which he must believe something to fulfill in order for him to be willing to ascribe "right" to it then a Nietzschean might say of a given object Y that it was right while a Christian might at the same time

say of the same object Y that it was not right, and their statements might be quite compatible. If one admits that there may be genuine disagreement about the normative properties of a thing even when there is agreement about the non-normative properties of that thing or if one admits that we cannot discover what is, for example, correct or beautiful from considering what is said to be correct and beautiful, then one must admit a distinction between the meaning of normative terms and the standard of their application. Such a distinction, however, would render Carnap and Chisholm's account of intension inapplicable to normative words.

If such a criticism were brought to Carnap's attention he would likely say that his account of intension covered only the cognitive-meaning component of words<sup>1</sup>, that normative words only had non-cognitive meaning, and that the above criticism is thus beside the point. However, before dismissing such a criticism Carnap would first have to establish that normative words do not have cognitive meaning.

There is perhaps also a second class of words for which Chisholm and Carnap's account of intension will not hold. I do not know of any name that has been given to words of this type nor do I know precisely how to characterize them.

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<sup>1</sup>Rudolf Carnap, "Meaning and Synonymy in Natural Languages," Philosophical Studies, VI (1955), p. 37.

However, I shall call this class of words "trans-empirical" and, by citing hypothetical examples, I shall try to make clear what type of words (not what words) belong to this class and why Chisholm and Carnap's account of intension is inapplicable to them.

If the word "immortal" means, for X at time T, not subject to death, then this word would be (for X at time T) a transempirical word because, while empirical evidence would be relevant to, and a ground of, its applicability no empirical evidence could completely justify its application. No matter how long anyone had lived, say one thousand years, X would still (in saying that such a person was immortal) be going beyond the evidence on which he based his statement. Now it might be the case that the condition which X must believe an object Y to fulfill in order for him to be willing to ascribe the predicate "immortal" to Y is that Y have lived for one thousand years but, nevertheless, in ascribing "immortal" to Y, X would, by hypothesis, be saying not that Y has lived for one thousand years but rather that Y is not subject to death. Thus the intension of "immortal" for X at time T would not be the condition which X must believe Y to fulfill in order for X to be willing to ascribe "immortal" to Y, and so Carnap and Chisholm's rule would not work for the intension of "immortal" if "immortal" means what we have supposed it to mean.

To take another example, suppose that "A is the cause of B" means, for X at time T, the conjunction of (1) the occurrence of A is always temporally prior to the occurrence of B; (2) the occurrence of A is always followed by the occurrence of B; and (3) B would not occur if A had not occurred previously. If this is what X means when he says that A causes B then X could never know with complete certainty that A was the cause of B, for X could not know that (3) was true and could at best only know that (1) and (2) were probable. X might nevertheless be willing to say that A is the cause of B when he believes that (4) in all cases so far observed the occurrence of A preceeded the occurrence of B and that (5) in all cases so far observed the occurrence of B followed the occurrence of A. Conditions (4) and (5) would then be the conditions that X must believe two events to fulfill in order for X to be willing to say of these events that they are causally related. But since the intension of "A is the cause of B" is not (4) and (5) but (1), (2), and (3), it again is not the case that the intension of all words for X at time T is the condition which X must believe some object to fulfill in order for X to be willing to ascribe a particular predicate to that object.<sup>1</sup>

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<sup>1</sup>In a certain sense, of course, one would not say that events A and B are causally related (i.e., one would not say

Many analyses of the expression "physical object" would make this word, too, a transempirical word. According to such analyses, to say something is a physical object is to say that under certain unrealized conditions a given thing would behave in certain specified ways, while the evidence for making such statements (i.e., the conditions something must be believed to fulfill in order for someone to be willing to ascribe "physical object" to it) is that under certain realized conditions the given thing has behaved in certain specified ways. What one is saying when one calls something a physical object is thus quite different from the believed-fulfilled-conditions on which such a statement is based, and thus the intension of the term "physical object" is not, as Carnap and Chisholm would say, these believed-fulfilled conditions.

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(1), (2) and (3)) unless one believed these events fulfilled conditions (1), (2) and (3). But one would believe these events fulfilled conditions (1), (2) and (3) if, and only if, one believed they fulfilled conditions (4) and (5). While there is no evidence to substantiate fully one's belief in (1), (2) and (3), there is evidence to substantiate one's belief in (4) and (5). Thus, first one's belief in (4) and (5) is (by means of substantiating evidence) evoked and then (and without further evidence) one's belief in (1), (2) and (3) is evoked. Thus only if one believes (4) and (5) is one willing to say (1), (2) and (3) of two events. Hence conditions (4) and (5) are the conditions which one must believe to be fulfilled if one is willing to predicate (1), (2) and (3) of two events, even though, when one predicates (1), (2) and (3) of two events one also of course believes that these events fulfill conditions (1), (2) and (3).

These transempirical words are like normative words in that their meaning for a given person at a particular time is not just the sum of the conditions which that person must believe an object to fulfill in order for him to be willing to ascribe a transempirical word to that object, and, like normative words, transempirical words (if there are any) do not conform to Chisholm's and Carnap's account of intension. Their account, then, works at best only for that class of words which is non-normative and non-transempirical. How large this class of words is depends on how large the class of transempirical words is: if "table", "salt", "man" and other words which allegedly refer to physical objects are analysed in transempirical terms then the class of words for which Chisholm and Carnap's analysis may hold would be considerably diminished.

And even if we consider only that class of words to which Chisholm and Carnap's analysis of intension does seem to apply, it still would not be the case that Chisholm and Carnap had met Quine and White's demands even for these words for, while synonymy has been explained in terms of sameness of intension and intension in terms of conditions which a person must believe an object to fulfill, no suggestion has been made as to how we are to discover just what conditions a person must believe an object to fulfill when he applies a predicate to that object. And until such an account is

given we cannot determine the intension of the term in question and consequently cannot determine synonymy or analyticity.

I would thus conclude that Carnap and Chisholm's account of synonymy is more satisfactory than that of Perkins and Singer but that nevertheless it is not sufficient to meet Quine and White's demands.

## CHAPTER VI

### CONCLUSION

In view of what has been said in the last chapter about the unsatisfactory character of the recent attempts to give a workable criterion of synonymy I think it is fair to conclude that this request of White and Quine has not yet been met and that consequently a workable method for deciding whether or not non-repetitive statements are analytic has also not yet been provided. Because of the considerable effort which has been expended by quite a number of competent philosophers, apparently without any acceptable results being achieved, it is perhaps in order to review the legitimacy of Quine and White's request.

Since it is a criterion (rather than a definition) of synonymy that is being requested, such a criterion, if it could be given, would be of the form "Synonymous words are words having characteristics abc" where "abc" do not mean the same as "synonymous" but where a, b and c are such that their presence or absence could be tested empirically. Now the question arises whether this statement which we are being asked to produce is to be contingent or necessary. Since there seems to me to be evidence in favour of both possibilities I shall consider both interpretations individually,

beginning with the possibility that we are being asked to produce an empirical and contingent criterion of synonymy.

White tells us<sup>1</sup> that the characteristics a, b and c must be co-extensive with the subject, synonymous words, that they must be related to it as "featherless biped" is said to be related to "man". Now the way "featherless biped" is usually said to be related to "man" is that these two terms apply to the same things, as do terms related by definition such as "bachelor" and "man of mature years who has never been married"; but, unlike terms related by definition, this relationship is only accidental and contingent and so it might well be the case that tomorrow there will be a man who is not a featherless biped, whereas, given our hypothesis about the meaning of "bachelor", there could never be a bachelor who was not an unmarried man of mature years. Thus characteristics which are related as "man" and "featherless biped" are said to be related are only contingently related. Since we have been asked to give a term which is related to "analytic statement" or "synonymous words" as "featherless biped" is said to be related to "man" this requested criterion would seem to be contingent, for "man" and "featherless biped" are only contingently related.

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<sup>1</sup>Morton G. White, "The Analytic and the Synthetic: an Untenable Dualism," Semantics and the Philosophy of Language, ed. L. Linsky, p. 276.

But if the criterion is a contingent statement, what right have we to expect it to hold for all instances of synonymy or, alternatively, what right have we (or White or Quine) to expect that it is possible to find a criterion which is contingent and which is also such that it will always distinguish between synonymous pairs of words? One of the marks of contingently related properties or things is that a statement of their relationship does not guarantee anything about the future relationship of things denoted by the subject and predicate terms, and so need not hold in future cases. If we are being asked to produce a criterion which is contingent and applicable to all cases (past, present, and future) of allegedly synonymous words then I fail to see why we have not good reason to judge this request to be unreasonable, for no reason has been given to justify the assumption that it is theoretically possible to meet such a request.

But perhaps this request could be interpreted in a different way. White indicates that he will only accept a criterion that is applicable to all cases of allegedly synonymous words, for it was because some suggested criteria might not apply to all cases that he rejected them. This seems to suggest that the only kind of criterion which White would accept is one which states a connection which would

always hold between synonymous words. Such a criterion, however, might well be interpreted not as a contingent statement but rather as a necessary statement. But since White objects to non-repetitive allegedly analytic statements being called necessary it is hardly likely that he would intentionally demand that a statement be necessary which is not even claimed to be analytic.

This raises the question whether White is implicitly requesting a synthetic and necessary statement or if, alternatively, he is making the unreasonable request discussed above of asking for a contingent criterion that would apply to all cases of allegedly analytic words. Whichever way White's request is interpreted it would seem that the failure of the attempts made so far to meet his request is understandable, for we have no reason to believe that a synthetic necessary statement which can serve as a criterion of synonymy can be given, while the request for a contingent statement applicable to all cases of allegedly synonymous words has been shown to be unreasonable. If this is so, then the request that has been perplexing philosophers is illegitimate and the pessimism regarding the synthetic-analytic distinction engendered because this (illegitimate) request could not be met is unnecessary.

However, while I believe White's request to be illegitimate

and his pessimism regarding the synthetic-analytic distinction to be unnecessary, he has nevertheless performed a service to philosophy in that he has drawn to the attention of philosophers the fact that there are as yet no satisfactory accounts of methods for testing synonymy or analyticity. Although we have no reason to believe that there is any one criterion of synonymy or that there is any one condition which all and only synonyms will meet this does not of course mean that there is no way of testing whether words are synonymous. We are rather thrown back into the situation of having to find tests (plural) which will work for different kinds of allegedly synonymous words. Since the statement "Words 'A' and 'B' are synonymous" is itself a contingent empirical statement, it can at best only be shown to be probably true, and so satisfactory criteria of synonymy, if they could be found, would be such that they would only give a certain probability to a statement of synonymy. Thus we have less to hope for from criteria of synonymy, but on the other hand the task which confronts philosophers is more modest than the one White and Quine set.

Now, while I cannot suggest any method for testing synonymy such that we could discover with certainty whether or not any two expressions are synonymous, I do not think that it is impossible to demonstrate that it is highly probable

that two words have or have not the same meaning. The method which I shall now outline for testing the synonymy of two expressions is in many ways very similar to that outlined by Carnap and Chisholm but in several important respects it also differs from what they suggested.

It will be recalled that Carnap began by giving us rules for determining the extension of a term, after which he claimed to have told us how we could test the intension of a term. However, to say that a word "Q" denotes a thing Y is to make an empirical assertion the truth of which depends on the meaning of the word "Q". Until the meaning of this word is known I do not see how it can be known what "Q" denotes, and so I do not think that one can establish the extension of "Q" before establishing its intension. Carnap tries to go about finding out the extension of "Q" by examining those things which a given person or group of persons calls "Q" but, as Chisholm has noted, the person or group of persons whose responses are being examined may hold mistaken beliefs about the objects that are presented to him and so may consequently be willing to apply "Q" to things which are really not "Q" or withhold "Q" from things which really are "Q". For example, if he means by "horse" abc, he may be willing to call something which has properties a and b but not c by the word "horse" because he mistakenly believes that this thing also has property c, in which case he would be

calling something a horse which, given his meaning of the word "horse", would not be a horse at all. However, we could not detect such mistakes unless we already knew what the intension of "Q" is. And once we know this we can then determine the extension of "Q" by studying facts about the objects themselves without running the risk of being led astray by people's mistaken responses to presented objects. Thus, although a study of the alleged extension of "Q" may indeed be very helpful in suggesting to us hypotheses about the intension of "Q", I do not think that the actual extension of "Q" can be established until after one has determined the intension of this term. And so, contrary to what Carnap advised, one must begin by trying to establish not the ex-ension of a term but rather its intension.

But how should we go about establishing the intension of a word "Q", or, if it should be suggested that "Q" means the same as "P" means, how should we go about verifying this claim? It will be recalled that White and Quine want some method of empirically ascertaining synonymy. To meet this request we must find some method of empirically--and preferably behaviouristically--testing the intension of a given word.

This problem may be solved, I believe, by following a method very similar to that which Carnap suggested for testing the intension of a word. As Carnap suggested, we

should test a hypothesis about the intension of word "Q" for person X by asking X a series of contrary-to-fact conditional questions. However, Carnap advised that one of the ways we might test whether person X means by "Q" R or Z (when X refers to things Y which are both R and Z by "Q") is by presenting X with Y and asking him if he would call it "Q" if it were not Z and then asking him if he would call it "Q" if it were not R. But even in this case it would be possible for X to hold false beliefs about what is presented to him. This difficulty could be avoided, however, if we did not present X with anything at all but simply restricted ourselves to testing X purely verbally by asking him a series of contrary-to-fact conditional questions about hypothetical entities. And if this difficulty could be avoided then one could also avoid having to analyse intension in terms of belief (as Chisholm suggested) and thus one could avoid the difficulties which such an analysis has been found to involve.

Now the contrary-to-fact conditional questions which one would ask in testing the intension of a word might vary with the word being examined. But certain sorts of questions would continually recur. Thus if one were testing whether person X means by "Q" R or Z one might question X as follows: "If something were Z would you call it 'Q'? If something were

R would you call it 'Q'? If something were not R would you call it 'Q'? If something were not Z would you call it 'Q'?" and so on. There would be no one question which would establish the intension of the word in question but the answers to each of a series of questions would constitute positive or negative evidence.

Questions of the form outlined above would be sufficient to test the intension of many words fairly reliably, although additional questions would need to be asked in some cases. If, for example, we were testing whether "equilateral triangle" means triangle having three equal sides or triangle having three equal angles, the answer to the question "If something was a triangle and had three equal angles but not three equal sides, would you call it an equilateral triangle?" and to the question "If something were a triangle and had three equal sides but not three equal angles, would you call it an equilateral triangle?" should be sufficient to decide between the hypothesis that "equilateral triangle" means triangle having three equal sides and the hypothesis that it means triangle having three equal angles.

If a word "Q" is suspected of being normative then the meaning of this word can be distinguished from some other property, "V", which occurs in a standard S and is unvaryingly related to Q, by asking such questions as "Would you call

something "Q" because it is V, or is being Q the same as being V?", although this question would just be one among many that would need to be asked.

By questions of this sort hypotheses about the meaning of a given word for a given individual may be tested and assigned probabilities. And if we were to test a number of people and found that they all responded to the same questions in the same way then we would be able to say with a certain degree of probability what the intension of "Q" was for that group of people.

Our conclusions would of course always be fallible for we could never be sure that we had asked all the appropriate questions and consequently it would always be possible that some other (as yet unasked) question would falsify our conclusion. However, since our conclusion is an empirical statement we should not be alarmed or surprised at its fallibility.

Now Quine and White would quite likely not be satisfied with the method of testing intension which I have outlined because it consists in asking contrary-to-fact conditional questions and they object to a criterion of synonymy or analyticity being formulated in the subjunctive mood. However, while the difficulties with the subjunctive may indeed be many <sup>1</sup>, we do at least understand such subjunctive assertions,

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<sup>1</sup>These are discussed on pages 90-91 of this study.

which is all that is required in order for intension to be tested in the way I have outlined. Thus, in spite of the fact that to test the intension of a word we must employ contrary-to-fact conditional questions, our testing procedure is not on that account rendered unacceptable.

One possible source of error that could creep into such a testing procedure would arise from the words occurring in the questions (other than those whose intension is being examined), such as "call" or "you", being used in unusual or esoteric senses by the person being questioned. Now, if the person X who is being examined had a completely private vocabulary consisting of the same marks and sounds as others use but such that he attached quite different meanings to these marks and sounds from those that others did then I do not see how we could find out with any high degree of probability what X meant by his words, for his responses to verbal questioning would not be a reliable guide. Nor, as we have seen, could the method of presentation of objects be used. However, since inter-subjective communication is not only possible but clearly actual, I think it can be inferred that at least the great majority of us do attach the same meaning to marks and sounds of the same type and that therefore there is little likelihood of the method of testing the intension of words outlined above leading us into error. Assuming that words

are used in the same senses by almost all people I would then conclude that by asking questions of the type outlined rival hypotheses about the meaning of a given word might be tested and assigned probabilities.

Like any other hypothesis the degree of probability that could be reached would depend on the thoroughness of the testing and the number of people who are tested. But at any rate it would be theoretically possible to determine with a high degree of probability whether or not hypotheses about the intension of the word "Q" for person X or group G are correct. Our results would of course not be certain but, since a statement of the form "The intension of 'Q' is abc" is a contingent empirical statement, certainty ought not to be expected. And if we can test the intension of words in the way I have suggested we can then make pronouncements about synonymy by using Carnap's rule<sup>1</sup> that two words are synonymous for a person or group of persons if they have the same intension for that person or group of persons. Thus we shall have outlined a scientific method for deciding whether or not words are synonymous, which is precisely the problem that was in need of being solved.

Although this procedure for testing synonymy has not

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<sup>1</sup>Rudolf Carnap, "Meaning and Synonymy in Natural Languages," Philosophical Studies, VI (1955), p. 42.

been explicitly suggested in the philosophical journals as a method of meeting Quine and White's demand, it seems to me that it is the method that is generally implicitly adhered to when an alleged definition of a word is questioned. For example, if someone suggests that the word "W" means T and someone else objects to this definition it would not be at all out of the ordinary for him to try to show that something which would be called "W" is not T. Thus I do not claim that this is by any means an original method for testing synonymy; what I do suggest is that it is a satisfactory method and one which will meet Quine and White's demands.

While I believe that this is the surest way to go about testing synonymy, another, but less adequate guide to synonymy might be that of interchangeability salva veritate. In spite of all that has been said earlier about the criticisms made of interchangeability there is nevertheless one class of statements where interchangeability of synonymous words without change of truth value has gone unchallenged. This is the class of simple categorical non-linguistic statements such as "Some children are mischievous"; "Tennis balls are white"; and "Green is a restful colour to the eyes". However, while it seems true that synonymous words can be substituted in such statements without change of truth value, non-synonymous but co-extensive terms might also be substituted in this way. For example, if "featherless biped" were

substituted for "rational animal" in the true statement "John is a rational animal" the resulting statement would doubtless still be true even though "rational animal" and "featherless biped" are of course not synonymous. Interchangeability without change of truth value in simple categorical non-linguistic statements is thus perhaps best regarded as a necessary but not a sufficient condition which synonymous words must meet. However, in spite of the limitations of this criterion it is nevertheless useful in that it is a simpler method for eliminating unsatisfactory suggested synonyms than going through the more complex process of testing intension in the way outlined above. If two words are not interchangeable salva veritate in simple categorical non-linguistic statements then they cannot be synonymous; if they are interchangeable, however, they still may not be synonymous and so further testing by means of contrary-to-fact conditional questions should be undertaken. Perhaps in time still other satisfactory criteria will be put forth for testing the synonymy of words. Nevertheless, even without additional criteria, I do not see why we cannot now, with the criteria I have discussed, decide whether or not two expressions are synonymous.

These criteria, it should be noted, do not help us to arrive at a hypothesis about the meaning of a word.

Arriving at such a hypothesis would still require intelligent insight into the conditions under which a word is used as well as originality in forming a hypothesis to account for this use. Once a hypothesis is put forth, however, these criteria will enable us to test its satisfactoriness and verify (or falsify) it with a high degree of probability.

Quine and White requested that a method be put forth either for testing synonymy without appeal to analyticity or for testing analyticity without appeal to synonymy. Since it has been shown how the former can be done it is now (given this method for testing synonymy) no problem to decide whether or not a non-repetitive statement is analytic. If a statement of the form "A is B", or "If P then Q", is reducible to a logical form all of whose instances are true, such as "A is A" or "If P then P" then the statement is analytic. To know this we need only know whether "A" and "B", and "P" and "Q", are synonymous, and we now have a method for testing this. If we can show with a high degree of probability that "A" and "B" have the same intension for person X then we may say, with a high degree of probability, that the statement "A is B" is analytic for that person. And if we can show with a high degree of probability that "A" and "B" have the same intension for a certain group of people or for all who use a certain language then we may say that

"A is B" is analytic for the group or in that language. In this way it should be possible to test claims that statements are analytic and thus to defend the synthetic-analytic distinction against the criticism made of it.

On the basis of this examination of the charges of the critics of the synthetic-analytic distinction I would conclude that those who, like Goodman, suggest that no non-repetitive statements are analytic are making a false claim, as are those who, like Quine and White, claim that we can never know whether or not a non-repetitive statement is analytic. What they might rather have claimed is that we cannot know with certainty whether a non-repetitive statement is analytic. However, since, as they admit, the analyticity of non-repetitive statements is dependent on the synonymy of different expressions, and since synonymy is an empirical matter about which we should not expect certainty, such a state of affairs should not be regarded as an occasion for alarm or pessimism.

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