
The Analytic and the Synthetic : an Untenable Dualism¹

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DEWEY HAS spent a good part of his life hunting and shooting at dualisms: body-mind, theory-practice, percept-concept, value-science, learning-doing, sensation-thought, external-internal. They are always fair game and Dewey's prose rattles with fire whenever they come into view. At times the philosophical forest seems more like a gallery at a penny arcade and the dualistic dragons move along obligingly and monotonously while Dewey picks them off with deadly accuracy. At other times we may wonder just who these monsters are. But vague as the language sometimes is, on other occasions it is suggestive, and the writer must confess to a deep sympathy with Dewey on this point. Not that distinctions ought not to be made when they are called for, but we ought to avoid making those that are unnecessary or unfounded. It is in this spirit that I wish to examine a distinction which has come to dominate so much of contemporary philosophy—the distinction between analytic and synthetic statements in one of its many forms. It must be emphasized that the views which will be put forth are not strict corollaries of Dewey's views; indeed, he sometimes deals with the question so as to suggest disagreement with what I am about to argue. But I trace the source of my own general attitudes

¹ The present paper is a revised version of one read at the annual meeting of the Fullerton Club at Bryn Mawr College on May 14, 1949. It owes its existence to the stimulus and help of Professors Nelson Goodman and W. V. Quine. My debt to them is so great that I find it hard to single out special points. My general attitude has also been influenced by discussion with Professor Alfred Tarski, although I would hesitate to attribute to him the beliefs I defend.

on this point to Dewey, even though my manner and method in this paper are quite foreign to his.

Recent discussion has given evidence of dissatisfaction with the distinction between analytic and synthetic statements. A revolt seems to have developed among some philosophers who accepted this distinction as one of their basic tenets a few short years ago. So far as I know, this attitude has not been given full expression in publications, except for a few footnotes, reviews, and undeveloped asides. In this paper I want to present some of the reasons for this decline of faith in such a pivotal distinction of recent philosophy, or at least some of the reasons which have led to the decline of my own assurance. On such a matter I hesitate to name too many names, but I venture to say, under the protection of the academic freedom which still prevails on such matters, that some of my fellow revolutionaries are Professor W. V. Quine of Harvard and Professor Nelson Goodman of the University of Pennsylvania. As yet the revolution is in a fluid stage. No dictatorship has been set up, and so there is still a great deal of freedom and healthy dispute possible within the revolutionary ranks. I, for one, am drawn in this direction by a feeling that we are here faced with another one of the dualisms that Dewey has warned against.

There is some irony in the fact that some of our most severely formal logicians have played a role in creating doubt over the adequacy of this great dualism—the sharp distinction between analytic and synthetic. It is ironical because Dewey has never looked in this direction for support; indeed he has shunned it. But such a phenomenon is not rare in the history of philosophy. Dewey has told of his attachment to Hegel's language at a time when he was no longer a Hegelian, and in like manner the contemporary revolt against the distinction between analytic and synthetic may be related to Dewey's anti-dualism. Perhaps this is the pattern of philosophical progress—new wine in old bottles.

There are at least two kinds of statements which have been called analytic in recent philosophy. The first kind is illustrated by

true statements of formal logic in which only logical constants and variables appear essentially, *i.e.* logical truths in the narrowest sense. For example:

$$(p \text{ or } q) \text{ if and only if } (q \text{ or } p)$$

$$p \text{ or not-}p$$

$$\text{If } p, \text{ then not-not-}p$$

and similar truths from more advanced chapters of modern logic. With the attempts to define "analytic" as applied to these I shall not be concerned. Nor am I interested here in the ascription of analyticity to those which are derived from them by substitution of constants for variables. This does not mean that I do not have related opinions of certain philosophical characterizations of this type of statement, but rather that my main concern here is with another kind of statement usually classified as analytic.

My main worry is over what is traditionally known as essential predication, best illustrated by "All men are animals," "Every brother is a male," "All men are rational animals," "Every brother is a male sibling," "Every vixen is a fox"—Locke's *trifling propositions*. I am concerned to understand those philosophers who call such statements analytic, as opposed to true but merely synthetic statements like "All men are bipeds," "Every brother exhibits sibling rivalry," "Every vixen is cunning." The most critical kind of test occurs when we have a given predicate like "man," which is said to be analytically linked with "rational animal" but only synthetically linked with "featherless biped," although it is fully admitted that all men are in fact featherless bipeds and that all featherless bipeds are in fact men. The most critical case occurs when it is said that whereas the statement "All and only men are rational animals" is analytic, "All and only men are featherless bipeds" is true but synthetic. And what I want to understand more clearly is the ascription of analyticity in this context. What I will argue is that a number of views which have been adopted as papal on these matters are, like so many papal announcements, obscure. And what I suggest is that the pronouncements of the modern, empiricist popes are unsuccessful attempts to bolster the

dualisms of medieval, scholastic popes. From the point of view of an anti-dualist, their distinctions are equally sharp, even though the moderns make the issue more linguistic in character. But the similarities between the medievals and the moderns are great; both want to preserve the distinction between essential and accidental predication and both have drawn it obscurely.

Quine² has formulated the problem in a convenient way. He has pointed out (with a different illustration) that the statement "Every man is a rational animal" is analytic just in case it is the result of putting synonyms for synonyms in a logical truth of the first type mentioned. Thus we have the logical truth:

(1) Every *P* is *P*

From which we may deduce by substitution:

(2) Every man is a man.

Now we put for the second occurrence of the word "man" the expression "rational animal" which is allegedly synonymous with it, and we have as our result:

(3) Every man is a rational animal.

We may now say that (3) is analytic in accordance with the proposed criterion. Quine has queried the phrase "logical truth" as applied to (1) and the phrase "is synonymous with" as applied to "man" and "rational animal," but I am confining myself to the latter.

Quine has said that he does not understand the term "is synonymous with" and has suggested that he won't understand it until a behavioristic criterion is presented for it. I want to begin by saying that I have difficulties with this term too, and that this is the negative plank on which our united front rests. I should say, of course, that the complaint when put this way is deceptively modest. We begin by saying we do not understand. But our opponents may counter with Dr. Johnson that they can give us arguments but not an understanding. And so it ought to be said that the objection is a little less meek; the implication is that many who *think* they understand really don't either.

² "Notes on Existence and Necessity," *Journal of Philosophy*, Vol. XL (1943), pp. 113-127.

Now that the problem is introduced, a few preliminary observations must be made.

First: it might be pointed out that we are searching for a synonym for the word "synonym" and we must, therefore, understand the word "synonym" to begin with. Now it *would* be peculiar to frame the thesis by saying that a synonym for "synonym" has not been found, for then it would appear as if I did not understand the word "synonym." Obviously, if I did not understand the word "synonym" and I formulated my complaint in this way, I could hardly be said to understand my own complaint. But such criticism is avoided by saying, not that there is no synonym available for the word "synonym," but rather that no one has presented even an extensional equivalent of it which is clearer than it. In short, rather weak demands are made on those who hold that the word "synonym" may be used in clearing up "analytic"; they are merely asked to present a criterion, another term which is extensionally equivalent to "synonym." In other words, a term which bears the relation to "synonym" that "featherless biped" bears to "man" on their view.

Second: whereas Quine appears to require that the criterion for being synonymous be behavioristic or at least predicts that he won't understand it if it's not, I make less stringent demands. The term formulating the criterion of being synonymous will satisfy me if I understand it more clearly than I understand the term "synonymous" now. And I don't venture conditions any more stringent than that. It should be said in passing that Quine's behaviorism would appear quite consonant with Dewey's general views.

Third: it is obvious that if the problem is set in the manner outlined, then the statement "'All men are rational animals' is analytic" is itself empirical. For to decide that the statement is analytic we will have to find out whether "man" is in fact synonymous with "rational animal" and this will require the empirical examination of linguistic usage. This raises a very important problem which helps us get to the root of the difficulty and to ward off one very serious misunderstanding.

The demonstration that "All men are rational animals" is analytic depends on showing that it is the result of putting a synonym for its synonym in a logical truth. In this situation we find ourselves asking whether a statement in a natural language or what Moore calls ordinary language—a language which has not been formalized by a logician—is analytic. We find ourselves asking whether two expressions in a natural language are synonymous. But this must be distinguished from a closely related situation. It must be distinguished from the case where we artificially construct a language and propose so-called definitional rules. In this case we are not faced with the same problem. Obviously we may *decide* to permit users of our language to put "rational animal" for "man" in a language L_1 . (For the moment I will not enter the question of how this decision is to be formulated precisely.) In that same language, L_1 , which also contains the phrase "featherless biped" in its vocabulary, there may be no rule permitting us to put "featherless biped" for "man." Thus we may say that in artificial language L_1 "All men are rational animals" is analytic on the basis of a convention, a rule explicitly stated. In L_1 , moreover, "All men are featherless bipeds" is not analytic. But it is easy to see that we can construct a language L_2 in which the reverse situation prevails and in which a linguistic shape which was analytic in L_1 becomes synthetic in L_2 , etc.

Now no one denies that two such languages can be constructed having the features outlined. But these languages are the creatures of formal fancy; they are dreamed up by a logician. If I ask: "Is 'All men are rational animals' analytic in L_1 ?" I am rightly told to look up the rule-book of language L_1 .³ But natural languages have no rule-books and the question of whether a given statement is analytic in them is much more difficult. We know that dictionaries are not very helpful on this matter. What some philosophers do is to pretend that natural languages are really quite like these artificial languages; and that even though there is no rule-book for them, people do behave *as if* there were such a book. What some philoso-

³ Even here, Quine asks, how do you know a rule when you see one? Only by the fact that the book has the word 'Rule-Book' on it, he answers.

phers usually assume is that the artificial rule-book which they construct in making an artificial language is the rule-book which ordinary people or scientists *would* construct, if they were asked to construct one, or that it is the rule-book which, in that vague phrase, presents *the* rational reconstruction of the usage in question. But suppose a logician constructs L_1 and L_2 as defined above, and now suppose he approaches L_3 , a natural language, with them. Can he say in any clear way that L_1 is *the* rational reconstruction of L_3 and that L_2 is not? My whole point is that no one has been able to present the criterion for such claims. And the reason for this is that no one has succeeded in finding a criterion for synonymy.

The moral of this is important for understanding the new revolt against dualism. I hope it makes clear that whereas I understand fairly well the expressions "analytic in L_1 " and "analytic in L_2 ," where L_1 and L_2 are the artificial languages mentioned, I do not understand as well the phrase "analytic in the natural language L_3 ."⁴ More important to realize is that my understanding of the first two expressions in no way solves the serious problem of analyticity as I conceive it, and I want to repeat that my major difficulties will disappear only when a term is presented which is coextensive with "synonymous" and on the basis of which I can (operationally, if you like) distinguish analytic sheep from synthetic goats. I want to repeat that I am not doing anything as quixotic as seeking a synonym for "synonym."

Those who refuse to admit the distinction between "analytic in L_1 " and "analytic in the natural language L_3 " will, of course, disagree completely. But then, it seems to me, they will have to refrain from attributing analyticity to any statement which has not been codified in a formalized language. In which case they will find it hard to do analysis in connection with terms in *ordinary language*. They may say, as I have suggested, that people using natural languages behave *as if* they had made rules for their language just like those of L_1 and L_2 , but then how do we establish when people behave *as if* they had done something which they haven't

⁴For many years Quine has also pointed to the unclarity of the phrase "analytic in L ," where " L " is a variable even over formal languages.

done? As we shall see later, clearing this problem up is just as difficult as the one we start with, for it involves the equally vexatious problem of contrary-to-fact conditional statements. I suppose it would be granted that those who use natural language do not make conventions and rules of definition by making a linguistic contract at the dawn of history. What defenders of the view I am criticizing want to hold, however, is that there are other ways of finding out whether a group of people has a convention. And what I am saying is that philosophers should tell us what these ways are before they dub statements in natural languages "analytic" and "synthetic."

The point at issue is closely related to one discussed at length by Professor C. I. Lewis in *An Analysis of Knowledge and Valuation* (1946). We agree in seeing a problem here which is overlooked by what I shall call crude conventionalism, but differ in our conception of where the solution must be sought. Lewis is led to say 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*. Lewis has dealt with this matter more extensively than any recent philosopher who advocates a sharp distinction between analytic and synthetic, and his arguments are too complex to be treated here. In any case, his views are quite different from those upon which I am concentrating in this paper. He holds that I need only make what he calls an "experiment in imagination" to find out whether all men are necessarily rational animals. And when I try this experiment I am supposed to conclude that I *cannot* consistently think of, that I cannot conceive of, a man who is not a rational animal. But how shall we interpret this "cannot"? How shall we understand "thinkable"? I suspect that this view leads us to a private, intuitive insight for determining what each of us individually *can* conceive. How, then, can we get to the analyticity of the *commonly* understood statement? Lewis' most helpful explanation turns about the word 'include' in the following passage: "The question, 'Does your schematism for determining application of the term "*square*" include your schema-

tism for applying "rectangle"? is one determined in the same general fashion as is the answer to the question, 'Does your plan of a trip to Chicago to see the Field Museum include the plan of visiting Niagara to see the Falls?' " The inclusion of plans, furthermore, is a sense-apprehensible relationship for Lewis. One either sees or doesn't see the relationship and that is the end of the matter. It is very difficult to argue one's difficulties with such a position and I shall only say dogmatically that I do not find this early retreat to intuition satisfactory. I will add, however, that in its recognition of the problem Lewis' view is closer to the one advanced in this paper than those which do not see the need for clarification of "analytic in natural language." My difficulties with Professor Lewis are associated with the difficulties of intensionalism but that is a large matter.

I want to consider now two views which are avowedly anti-intensional and more commonly held by philosophers against whom my critical comments are primarily directed.

1—"Analytic statements are those whose denials are self-contradictory." Consider this criterion as applied to the contention that "All men are rational animals" is analytic in a natural language. We are invited to take the denial of this allegedly analytic statement, namely "It is not the case that all men are rational animals." But is this a self-contradiction? Certainly looking at it syntactically shows nothing like "*A* and not-*A*." And even if we transform it into "Some men are not rational animals" we still do not get a self-contradiction in the syntactical form. It might be said that the last statement is self-contradictory *in the sense* in which "man" is being used. But surely the phrase "in the sense" is a dodge. Because if he is asked to specify that sense, what can the philosopher who has referred to it say? Surely not "the sense in which 'man' is synonymous with 'rational animal'" because that would beg the question. The point is that the criterion under consideration is not helpful if construed literally and if not construed literally (as in the attempt to use the phrase "in the sense") turns out to beg the question.

Let us then suppose that the criterion is not used in this question-

begging manner. A self-contradiction need not literally resemble in shape "*A* and not *-A*" or "Something is *P* and not *-P*." All it has to do is to 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. Such an approach is very plausible and I would be satisfied with an account of the kind 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.

(a) Who is supposed to feel the horror in the presence of the opposites of analytic statements? Surely not all people in the community that uses the language. There are many who feel no horror at seeing people eat peas with a knife just as there are many who are not perturbed at statements that philosophers might think self-contradictory. Who, then?

(b) Let us remember that on this view we will have to be careful to distinguish the horror associated with denying firmly believed synthetic statements from that surrounding the denials of analytic statements. The distinction must not only be a distinction that carves out two mutually exclusive classes of sentences but it must carve them out in a certain 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.

(c) If analytic statements are going to be distinguished from synthetic true statements on the basis of the degree of discomfort that is produced by denying them, the distinction will not be a sharp one⁶ and the current rigid separation of analytic and synthetic will have been surrendered. The dualism will have been surrendered, and the kind of *gradualism* one finds in Dewey's writings will have been vindicated. The most recent justification of the distinction between essential and accidental predication will have been refuted. It may be said that sharp differences are compatible with matters of

⁶ On this point see Nelson Goodman's "On Likeness of Meaning," in *Analysis* October 1949, pp. 1-7. Also W. V. Quine's forthcoming *Methods of Logic*, section 33 (Henry Holt, N.Y., probably 1950).

degree. Differences of temperature are differences of degree and yet we may mark fixed points like 0° centigrade on our thermometers. But it should be pointed out that a conception according to which "analytic" is simply the higher region of a scale on which "synthetic" is the lower region, breaks down the radical separation of the analytic and the synthetic as expressive of different kinds of knowledge. And this is a great concession from the view that K. R. Popper⁶ calls "essentialism." It is reminiscent of the kind of concession that Mill wanted to wrest from the nineteenth century in connection with the status of arithmetical statements. Once it is admitted that analytic statements are just like synthetic statements, only that they produce a little more of a certain quality—in this case the quality of discomfort in the presence of their denials—the bars are down, and a radical, gradualistic pragmatism is enthroned. This is the kind of enthronement which the present writer would welcome.

2—"If we were presented with something which wasn't a rational animal, we would not call it a man." Such language is often used by philosophers who are anxious to clarify the notion of analytic in the natural languages. In order to test its effectiveness in distinguishing analytic statements let us try it on "All men are featherless bipeds" which by hypothesis is *not* analytic. Those who use this criterion would have to deny that if we were presented with an entity which was not a biped or not featherless we would not call it a man. But we *do* withhold the term "man" from those things which we know to be either non-bipeds or non-featherless. Obviously everything turns about the phrase "we would not call it a man" or the phrase "we would withhold the term 'man.'" Again, who are we? And more important, what is the pattern of term-withholding? Suppose I come to a tribe which has the following words in its vocabulary plus a little logic: "man," "rational," "animal," "featherless," and "biped." I am told in advance by previous visiting anthropologists that "man" is synonymous with "ra-

* See *The Open Society and its Enemies*, especially chapter 11 and its notes (Routledge, London, 1945).

tional animal" in that tribe's language, whereas "featherless biped" is merely coextensive with it. I wish to check the report of the anthropologists. How do I go about it?

In the spirit of the proposed criterion I must show that if anything lacked rationality it would not be reputed a man by the people in question. So I show them coconuts, trees, horses, pigs, and I ask after each "man?" and get "no" for an answer. They will not repute these things to be men. I must now show that there is a difference in their attitudes toward "rational animal" and "featherless biped" *vis-a-vis* "man." I originally produced things which lacked rational animality. But these very things also lack feathers and are not bipeds, and so the negative responses of the natives might just as well be offered as an argument for the synonymy of "man" and "featherless biped" as for the theory that "man" is synonymous with "rational animal." It would appear that such crude behaviorism will not avail. They don't call non-featherless-bipeds men just as they don't call non-rational-animals men. The criterion, therefore, is one that will not help us make the distinction.

We might pursue the natives in another way. We might ask them: Would you call something a man if it were not a featherless biped? To which they answer in the negative. Would you call something a man if it weren't a rational animal? To which they answer "no" again. But now we might ask them: Aren't your reasons different in each of these cases?—hoping to lead them into saying something that will allow us to differentiate their responses. Aren't you surer in concluding that something is not a man from the fact that it is not a rational animal, than you are in concluding it from the fact that it is not a featherless biped? If the savage is obliging and says "yes," we have the making of a criterion. But notice that it is a criterion which makes of the distinction a matter of degree. Not being a rational animal is simply a better sign of the absence of manhood than is the property of not being a featherless biped, just as the latter is a better sign than the property of not wearing a derby hat. It should be noticed in this connection that we are precluded from saying that the inference from "a is not a ra-

tional animal" to "a is not a man" is logical or analytic for them, since we are trying to explain "analytic." To use it in the explanation would hardly be helpful.

Probably the most helpful interpretation of this mode of distinguishing analytic and synthetic is that according to which we observe the following: when the natives have applied the word "man" to certain objects and are then persuaded that these objects are not rational animals, they immediately, without hesitation, withdraw the predicate "man." They contemplate no other means of solving their problem. But when they have applied the word "man" and are then persuaded that the things to which they have applied it are not featherless bipeds, they do not withdraw the predicate "man" immediately but rather contemplate another course, that of surrendering the hypothesis that all men are featherless bipeds. Now I suspect that this criterion will be workable but it will not allow us to distinguish what we think in advance are the analytic equivalences. It will result in our finding that many firmly believed "synthetic" equivalences are analytic on this criterion.

I am sure that there are a number of other ways of constructing the criterion that are similar to the ones I have just considered. No doubt students of language who have thought of this problem can develop them. But I want to call attention to one general problem that criteria of this sort face. They usually 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. Goodman⁷ 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 that is a very sandy foundation right now.

After presenting views like these I frequently find philosophers

⁷ "The Problem of Counterfactual Conditionals," *Journal of Philosophy*, Vol. XLIV (1947), pp. 113-128.

agreeing with me. Too often they are the very philosophers whose views I had supposed I was criticizing. Too often, I find, the criticisms I have leveled are treated as arguments *for* what I had supposed I was opposing. For example, there are some philosophers who construe the argument merely as an argument to show that words in natural language and scientific language are ambiguous—that “man” is synonymous with “rational animal” in one situation and with “featherless biped” in another—and who immediately embrace the views here set forth. But this is not what is being emphasized. Many philosophers who defend the view I have criticized admit that a word may have many meanings, depending on context. For example, John Stuart Mill, who admits that a biologist might regard as the synonym of “man,” “mammiferous animal having two hands,” and not “rational animal.” But Mill also holds that in common usage “rational animal” is the synonym. Because of this admission of a varying connotation Mill regards himself (justifiably) as superior to the benighted philosopher who holds what has been called “The one and only one true meaning” view of analysis. If the benighted philosopher is asked “What is the synonym of ‘man’?” he immediately replies “rational animal.” If he is a Millian, he says it depends on the situation in which it is used, etc.

I am not concerned to advocate this view here, because it is quite beside the point so far as the thesis of this paper is concerned. The difference between the Millian (if I may call him that without intending thereby to credit Mill with having originated the view) and his opponent (I would call him an Aristotelian if such matters were relevant), is comparatively slight. The Millian takes as his fundamental metalinguistic statement-form: “X is synonymous with Y in situation S,” whereas his opponent apparently refuses to relativize synonymy. The opponent merely says: “X is synonymous with Y.” What I want to emphasize, however, is that by so relativizing the notion of synonymy he is still far from meeting the difficulty I have raised. For now it may be asked how we establish synonymy *even in a given situation*. The problem is analogous to the following one in mechanics. Suppose one holds that the question:

"Is x moving?" is unanswerable before a frame of reference is given. Suppose, then, that motion is relativized and we now ask such questions in the form: "Is x moving with respect to y ?" But now suppose we are not supplied with a clear statement of how to go about finding out whether x is in motion with respect to y . I venture to say that the latter predicament resembles that of philosophers who are enlightened enough to grant that synonymy is relative to a linguistic context, but who are unable to see that even when relativized it still needs more clarification than anyone has given it.

I think that the problem is clear, and that all considerations point to the need for 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. I am not arguing that a criterion of analyticity and synonymy can never be given. I argue 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. If this is tenable, then a dualism which has been shared by both scholastics and empiricists will have been challenged successfully. 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. Another revolt against dualism will have succeeded.