

9. Logical Positivism and Pragmatism

The attempt to characterize any philosophic movement is a somewhat dubious enterprise, and the comparison of two such is doubly dubious. A movement is to an extent a fiction: there are only the individual thinkers agreeing in certain respects, presumably fundamental, and disagreeing in others; and to say anything important about their agreements without continual qualifying references to their divergences is almost inevitably to be inaccurate in some degree. Particularly this is true of pragmatism. To mention only its outstanding figures, Peirce and James and Dewey are all of them notable for the creative character of their thinking and the individuality of their genius. While to remark their influences upon one another is to comment on the obvious, it is equally obvious, both historically and by the internal evidence of their writings, that no one of them was primarily determined by such influence. Moreover, while James and Dewey, if not Peirce, have had great influence upon other philosophic thinkers in America, this influence has been notable for the breadth and variety of its effects rather than for its concentration into any definitely marked tradition. And again, although it is hardly justified to say that pragmatism is a method and not a theory, still the theses central to pragmatism do not cover the whole field of philosophy. Of Peirce in particular it is true that pragmatism is only one strand which entered into the complex pattern of his thought.

Logical positivism is less subject to this difficulty, on account of its origin in the Vienna Circle and the continuing intent of its proponents to cooperate. But one here encounters another: the vitality of this movement is evidenced by a habit of revision; from time to time its expositors move on to better judged positions in details and to more judicious formulations—or indubitably, to somewhat different ones. And however admirable this tendency, it makes it necessary for one who would mark them out to aim at a moving target, and be correspondingly doubtful of his accuracy.

Finally, I suffer the personal handicap that any comparison I may attempt between these two movements must be suspect on the ground of partisan sympathy and conviction.

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I do not attempt to avoid these difficulties; they must be taken as limitations of what I shall have to say. Even within them, I must hope, there may be interest in comparison between views which approximate to one another at points which are important but diverge at others which are no less significant. I must assume my capacity—though the reader need not—to elicit fundamental agreements in pragmatism; exegesis of doctrines of the individual pragmatists and defense of one's interpretations would be a topic by itself. And I shall attempt to mitigate the difficulty which an outsider must encounter with respect to logical positivism by having particularly in mind certain recent writings of Professor Carnap.¹ The comparison will be held to four topics: empiricism, the scope of science, the significance of metaphysics, and the status of evaluative and moral judgments—and of necessity, to the simpler and more manageable considerations falling under these heads.

I

Both movements present themselves as forms of empiricism; and for both, the crucial consideration in such empiricism is a conception of empirical meaning or 'sense.' Both would repudiate as lacking such meaning any statement which cannot be verified, or confirmed, by reference, ultimately, to specifiable empirical eventuations. Statements not having such empirical meaning need not be meaningless, in the ordinary sense; they may, for example, be analytic statements of logic or of pure mathematics. But a synthetic statement, affirming a matter of objective fact or state of affairs, either has such empirical meaning or it makes no genuine assertion.

Amongst pragmatists, the distinction of empirical meaning from the significance of analytic statements for the most part passes unremarked. Excepting Peirce, they have not much concerned themselves with what are here called 'analytic statements.' And it is doubtful whether Dewey would recognize such analytic statements as occurring in actual human thinking or discourse. But setting aside this topic of analytic statements, there would be a fundamental approximation of pragmatists and logical positivists in such a conception of empirical meaning as is suggested above. This is also the point of clearest agreement amongst pragmatists themselves, indicated by James's 'pragmatic test' and by Dewey's conception of meaning as exhibited in the outcome of a pro-

¹ *Philosophy and Logical Syntax* (London, 1935), *The Unity of Science* (London, 1934), and the paper "Testability and Meaning," in *Philosophy of Science*, Vol. 3, pp. 419-71 and Vol. 4, pp. 1-40.

cess of inquiry in which a problem is resolved, and identified by Peirce with his intended signification of the term 'pragmatism.'²

One notes that there are here in the pragmatic conception other elements than the emphasis upon empirical eventuations in which the meaning in question would be satisfied: there is also the emphasis upon conduct, upon experiment as an activity—borne out by the ever-recurring term 'practical' in pragmatic literature—and there is the qualification 'conceivable' which Peirce at least characteristically inserts when the set of phenomena pertinent to a meaning are referred to. These two adjectives 'practical' and 'conceivable' might be thought to be opposed in their significance here. But that is not the sense of the term 'practical' which is characteristic of pragmatism; its intended connotation is of *interests of action*, not of the practicable as opposed to what may be impracticable under existing conditions; the intended restriction is one of relevance, not of possibility. Thus pragmatism would regard meaning as limited by reference to what could make a difference for some active intent, but would regard any conceivable eventuality having such relevance—and not merely those which conditions allow to be realized—as comprehended under the meaning in question.

The pragmatic emphasis upon relevance to some active intent is largely or wholly omitted in logical positivism. But that point is, perhaps, of secondary interest in the present connection. Generally speaking, logical positivists resolve the other question—whether meaning concerns all conceivable empirical eventualities which if they could occur would be relevant, or only such as existing conditions allow—in the same way as do pragmatists: that is, in favor of the former alternative.³

The pragmatic conception of empirical meaning can, thus, be suggested by saying that, in the field of statements of objective matters of fact, and of terms intended to have application to them, whatever is, in the last analysis, non-sensuous is nonsensical. An empirical term has

² "... since obviously nothing that might not result from experiment can have any direct bearing upon conduct, if one can define accurately all the conceivable experimental phenomena which the affirmation or denial of a concept could imply, one will have therein a complete definition of the concept, and *there is nothing more in it*. For this doctrine he [the writer, Peirce] invented the name 'pragmatism.'" (*Monist*, Vol. 15, 1905, pp. 162-63.)

³ It would not be possible here to take account of complexities in Carnap's painstaking analysis of 'confirmable' and 'testable' in "Testability and Meaning." I attempt, however, to avoid any statement which would be misleading on account of such omission. The concept of 'realizable' there introduced would be pertinent to comparison with pragmatic instrumentalism or activism.

meaning only if a determination of its applicability can be specified in terms of sense-presentation or of what is imaginable; an objective statement is significant only so far as empirical confrontations which would attest its credibility can be specified. Terms and statements so intended but for which no such determination of their applicability or their credibility can be formulated are meaningless. And this conception is a point of approximation to the logical-positivistic conception of 'sense.'

However, there is a point of difference between the two, and one which does not have to do with refinements of theory, but rather with the fundamental fashion in which meaning is to be determined. The logical positivists show a tendency to substitute for the question, "What empirical confrontations would confirm this statement?" the different question, "What observation-sentences are consequences of this sentence?"; and to substitute for the question, "What criteria attest the applicability of this term?" the different question, "To what class of observable predicates is this term reducible?"; and for the question, "What is the empirical meaning or content of this term?" the question, "What other terms are synonymous with this one?" The content of a sentence is identified with a class of its non-valid consequences (its consequences which would not equally be consequences of *any* sentence); and two expressions are said to be synonymous if the content of any sentence containing one of them is not changed if we replace that expression by the other.⁴ Such substitutions are regarded as desirable in the interest of confining questions of meaning to questions of *logical* sense, and avoiding what is psychological and likely to be vague. Any question of the sensuous signification of a sentence or an expression is thus excluded. "Sometimes by 'sense' is meant the kind of thoughts and images that are connected with a given sentence. But in this case the question is a psychological one and has to be examined by the experimental method of psychology. In logical (syntactic) analysis we are not concerned with such questions."⁵ "But [in characterizing a language] is it not also necessary in order to understand the 'sense' of the sentences, to indicate the 'meaning' of the words? No; the demand thereby made in the material mode is satisfied by specifying the formal rules which constitute its syntax."⁶

⁴ See Carnap, *Philosophy and Logical Syntax*, pp. 57-58; and *Logical Syntax of Language* (London, 1937), p. 42.

⁵ Carnap, *Philosophy and Logical Syntax*, p. 57.

⁶ Carnap, *The Unity of Science*, p. 39. I believe that Carnap would now modify this statement, but am not sure.

No pragmatist could be satisfied with such a conception; it must result in specification of meaning in which precisely what a pragmatist would take to be the empirical meaning is omitted. Specifying the observation-sentences which are consequences of a given sentence indicates, or helps to indicate, the meaning of the given sentence only if the observation-sentences themselves have such meaning, and that meaning is already understood. Indicating the observation-predicates or perception-predicates to which a term is reducible indicates the empirical meaning of that term only if these observation-predicates already have an understood reference to specific qualities of experience. No reference to the *logical* relations between sentences or between terms can ever, by itself, convey the empirical meaning of anything. However unlikely it may be, it is theoretically possible that a person should know completely the formation rules and transformation rules of a language—the syntax of it and all synonyms in the dictionary of it—and yet be completely ignorant of the empirical signification of any term or sentence in that language. Such empirical meaning consists precisely in what Carnap here excludes, the associated imagery or the criterion in terms of sense by which what is meant is recognized when presented in experience. Words and sentences without such associated imagery are marks or noises without significance. Without associated imagery, strings of marks or of noises are not even words and sentences—are not even nonsense. The logical-positivistic theory fails to distinguish between syntactic or linguistic meaning—a relation of one verbal expression to other verbal expressions—and empirical meaning, which concerns the relation of expressions to what may be given in experience.

This difference between the logical-positivistic and the pragmatic mode of approach to questions of meaning runs very deep, eventually, because this attempt to logicize all problems, and to regard them as correctly and unambiguously statable only in 'the formal mode'—in terms of syntax of language—is connected with the logical-positivistic conception that philosophy has no legitimate business except that of logical analysis, and that philosophic questions which are characteristically stated in 'the material mode,' and which, *e.g.*, concern the relation between something stated and given experience, or between experience and real objects, are 'pseudo-problems.'

One point of special importance in this connection concerns the possible confirmation of statements—the validity of empirical cognition. Pragmatists and logical positivists would agree that such confirmation ultimately concerns what would be stated in 'observation-sentences' or in what were earlier called (in *The Unity of Science*) 'protocol sen-

tences.' But where pragmatism would characteristically speak of 'the content of experience,' logical positivism characteristically speaks of 'the protocol' or 'the observation-sentence,' thus confining statement of the problem to 'the formal mode' and the philosophical account of it to logical analysis. A pragmatist must regard such restriction to the formal mode as inevitably resulting in failure to deal with the problem of confirmation at all, and as ruling out the possibility of a genuinely empiricistic account of knowledge. This issue is worthy of careful attention, because it indicates a critical difference between the pragmatic and the logical-positivistic interpretation of empiricism.

The signification of 'observation-sentence' in more recent writings of the logical positivists is not identical with that of 'protocol sentence' in the earlier account. 'Protocols' are what would ordinarily be termed 'reports of experience' or 'statements of what is given,' although the meaning of such protocols is held to be 'interpersonal.' An 'observation-sentence' or the attribution of an 'observable predicate' is characterized as one with respect to which a person "is able under suitable circumstances to come to a decision with the help of a few observations." "There is no sharp line between observable and non-observable predicates because a person will be more or less able to decide a certain sentence quickly, *i.e.* he will be inclined after a certain period of observation to accept the sentence."⁷ However, the issues in question can be indicated without regard to such differences of formulation. A first point here is that when a certain statement which is not itself an observation-statement (whether 'protocol' or 'observation-sentence') is to be confirmed, question of that confirmation—it is agreed—eventually reduces to question of certain observation-statements. Affirmative decision with respect to such an observation-statement will be a decision that the statement to be confirmed is actually so confirmed (though presumably in part or in degree only). This connection between the statement to be confirmed and the observation-statement—it is agreed—is one which is established by an analysis of meaning (in some appropriate signification of the word 'meaning'). But it is not this relation to the observation-statement which confirms the statement so related to it—if it is actually confirmed—and it is not the observation-statement itself which confirms it; what confirms the statement to be confirmed is what determines 'acceptance' of the observation-statement as true or as credible. And what is that? Logical positivists perhaps regard the answer as one which goes without saying. We might agree; but in philosophic analysis it is sometimes well to state the obvi-

⁷ "Testability and Meaning," in *Philosophy of Science*, Vol. 3, p. 455.

ous. What determines the observation-statement to be true or credible, and thus confirms (partially) the statement to be confirmed, can be nothing but the content of an empirical presentation. The observation-statement is found 'acceptable' if the empirical presentation accords with what that 'observation-statement' asserts. It is no logical relation to any other statement which is here in question; it is a relation between a criterion of recognition in terms of sense or imagery (the empirical meaning of the observation-statement) and what is given in experience, or fails to be so given. An analysis of confirmation cannot be given in statements in the formal mode alone, because confirmation does not end in what observation-statements *mean* but in the determination of them as *true* or *credible*, by experience. To leave that obvious fact out of a supposedly empiricistic theory of verification or confirmation is to give us Hamlet without the Prince.

There is a further point which concerns this relation between protocols or observation-sentences and what determines them to be true or credible. A report of observation can have either of two intended meanings, and can be construed in either of two ways: (1) as formulation of an immediately presented content of experience or empirical confrontation, or (2) as an assertion of objective fact. An example of the former would be "This looks red" or "Red now"; of the latter, "This object has the color red." The alternatives in question are mutually exclusive; these two statements are of quite different import; the former can be true when the latter is false, and the latter can be true when the former is false. Statements of the former type may be called, for lack of a more appropriate term, 'subjective reports'; those of the latter type, 'objective reports.' Any report of observation will have one of these two meanings or the other. And except by an ambiguity which would require to be dispelled, no report could have both these meanings. We seldom have occasion to express subjective reports, and ordinary language is in consequence unsuited to unambiguous formulation of them; but we have occasion to apprehend what they express as often as we determine any empirical truth or credibility, since these are determinable ultimately only by reference to given experience. In the nature of the case, the truth of a subjective report is certain for the maker of it—unless he deliberately tells a lie in making it. But by contrast, an objective report is *not* certain. No statement of objective fact, such as the actual color of a seen object, is made certain by any single observation, nor indeed more than highly credible ('practically certain') by any finite set of observations. What an objective report affirms may be partially verified by what is presently given in experience—and what would be formulated by the corresponding subjective report—but it is

in all cases something capable of and calling for further verification, and such that methods of such further verification could be specified by anyone who understands what it means. By the same token, no even partial confirmation of *any* statement can *terminate* in objective reports, since these themselves require further confirmation.

In logical positivism, 'observation-sentences' are so characterized as not to be identifiable unambiguously either with subjective reports or with objective reports. Use of this expression thus serves to obscure issues which are critical for any empiricistic theory of knowledge. Indeed I think we must find it extraordinary that when we come precisely to that point where a confirmation is supposed to be finally assured, what we are told about the manner of this assurance is that a person "is able under suitable circumstances to come to a decision with the help of a few observations."⁸ And it is only by failing to meet the issues here involved that the logical positivists are able to formulate their account of confirmation exclusively in terms of statements in the formal mode—statements about the relations of linguistic expressions—and to avoid discussion of the relation between statements and presented experience, between statements and objects, and between experience and the objective facts it evidences. "These pseudo-questions," they tell us, "are automatically eliminated by using the formal mode."⁹ The question is whether they are eliminated or merely ignored.

That others who incline to the pragmatic point of view would make precisely these objections to logical positivism, I cannot of course say. But I am sure that they concern fundamental points with respect to which the pragmatic conception of verification and of the significance of 'truth' and of 'knowledge' differ from that of logical positivism.¹⁰

II

Both pragmatism and logical positivism represent generalization of attitudes which might be regarded as derived from natural science and as looking to science as the exemplar of knowledge in general. But pragmatism has never stood for that physicalistic pan-scientism which is a distinctive feature of positivism, nor indeed for pan-scientism in any sense which would exclude the equal significance of other types of

⁸ *Ibid.*

⁹ *The Unity of Science*, p. 83.

¹⁰ There are further implications, besides those suggested, which would likewise be important. In particular, the whole account of probability-judgment must be profoundly affected by such issues; and the question whether there are any ultimate certainties upon which the credibility of statements which are less than certain can come to rest, or whether credibility finally depends upon some such mutual relationship of less-than-certain statements as is put forward in rationalistic theories of the 'coherence' type.

formulation than the 'scientific.' It is one thing to say that scientific formulation is always pertinent and possible; it is a quite different thing to say that no other than scientific formulation is meaningful.

Moreover, what 'science' preponderantly connotes is different in the two cases. With logical positivism it is the *content* of science as exact formulation in physical terms upon which emphasis falls; with pragmatism, it is the *method* of science and its experimental and instrumental point of view—its attitude of regarding all accepted findings as in some degree provisional, and as attesting themselves by their value as working hypotheses and their usefulness in application—which is emphasized.

In the days when James's pragmatism was first put forward, the off-hand comment that it represented merely a generalization of the actual procedures of science was frequently made; and James evidences, in the chapter, "What Pragmatism Means,"¹¹ his acceptance of this as fundamentally correct. The same would hardly be said of Dewey: his conceptions derive in larger measure from critical consideration of the nature and significance of scientific truth, rather than from generalization of what could be thought of as taken over from science without being first subjected to such critique. But it is even more evident in the case of Dewey than it is with James that pragmatism means experimentalism and instrumentalism. And nothing could be more alien to either of them than recognition of physicalistic conceptions as the exclusively significant vehicles of truth. In the chapter above referred to, James has said:

"When the first mathematical, logical, and natural uniformities, the first *laws*, were discovered, men were so carried away by the clearness, beauty and simplification that resulted, that they believed themselves to have deciphered authentically the eternal thoughts of the Almighty.

"But as the sciences have developed further, the notion has gained ground that most, perhaps all, of our laws are only approximations. . . . Investigators have become accustomed to the notion that no theory is absolutely a transcript of reality, but that any one of them may from some point of view be useful. . . . They are only a man-made language, a conceptual short-hand, as some one calls them, in which we write our reports of nature; and languages, as is well known, tolerate much choice of expression and many dialects."¹²

And of pan-scientism, he overwrote specifically:

¹¹ In *Pragmatism: A New Name for Some Old Ways of Thinking* (New York, 1907), pp. 43-81.

¹² *Ibid.*, pp. 56-57.

"Certain of our positivists keep chiming to us, that, amid the wreck of every other god and idol, one divinity still stands upright,—that his name is Scientific Truth. . . . These most conscientious gentlemen think they have jumped off their own feet,—emancipated their mental operations from the control of their subjective propensities at large and *in toto*. But they are deluded. They have simply chosen from among the entire set of propensities at their command those that were certain to construct, out of the materials given, the leanest, lowest, aridest result. . . .

"The knights of the razor [Occam's razor] will never form among us more than a sect; but when I see their fraternity increasing in numbers, and, what is worse, when I see their negations acquiring almost as much prestige and authority as their affirmations legitimately claim over the minds of a docile public, I feel as if the influences working in the direction of our mental barbarization were beginning to be rather strong, and needed some positive counteraction."¹³

It is in point that this essay was written in 1881: the positivists referred to are not of course the logical positivists but that earlier school from whom they distinguish themselves—those who would reduce reality, in James's language, "to the bare molecular world." In how far he might have regarded such strictures as justifiable in the case of those who maintain instead that all states of affairs are expressible in physical language, one cannot say. To be sure, Carnap has said: "Our approach has often been termed 'Positivist'; it might equally well be termed 'Materialist.' No objection can be made to such a title provided that the distinction between the older form of Materialism and methodological Materialism—the same theory in a purified form—is not neglected."¹⁴ And there are sure to be some who will think such a statement more revealing than the complicated theory of physicalistic interpretation. However, it is clear that James's objection is to 'negations,' and would lie against the claim of *exclusive* truth for the scientific interpretation of reality and experience rather than against the supposition that all matters of observable fact are capable of such interpretation.

Apart from the repudiation of metaphysics and normative ethics—which, of course, itself sets signal issues—I do not find that the logical positivists have clearly declared themselves upon the question whether there are significant statements about 'states of affairs' which are *not*

¹³ "Reflex Action and Theism," in *The Will to Believe and Other Essays* (New York, 1897), pp. 131-33.

¹⁴ *The Unity of Science*, pp. 94-95.

in the universal language of physics, and not reducible to that language. In the earlier formulation, in the *Unity of Science*, Carnap states the physicalist thesis in the form: "Our thesis now makes the extended assertion that the physical language is a universal language, *i.e.* that every statement can be translated into it (every state of affairs can be expressed in it)."¹⁵ In the later discussion, in "Testability and Meaning," he says: "The so-called thesis of *Physicalism* asserts that every term of the language of science . . . is reducible to terms of the physical language. . . . We may assert reducibility of the terms, but not—as was done in our former publications—definability of the terms and hence translatability of the sentences. In former explanations of physicalism we used to refer to the physical language as the basis of the whole language of science. It now seems to me that what we really had in mind as such a basis was rather the thing-language, or, even more narrowly, the observable predicates of the thing-language."

And he expresses preference for the formulation: "Every descriptive predicate of the language of science is confirmable on the basis of observable thing-predicates."¹⁶ The revisions here are critical for the question whose answer we are attempting to determine. The earlier formulation asserts that the *physical language* (identified with a language of physics) is sufficient for expression of whatever is expressed in *any* significant statement. The revision says that the language of *observable thing-predicates* is sufficient to express the confirmations of all scientific predications. One may assume that it is still intended to affirm that all significant statements are reducible to statements of science; but that is not said. And if it were said, that would not mean—in terms of the revision—that all significant statements can be reduced to statements of physics; it would mean only *that they are such as would be confirmable by observation*.

I think that not only pragmatists but all empiricists who would object to the notion that all significant statements are reducible to terms of physics must be gratified by this revision; because although the term 'physicalism' is retained, the doctrine with which it appears to be identified here is merely to the effect that all statements of scientific matters of fact (and perhaps all formulations of states of affairs) are such as would be confirmable by observation. This paper "Testability and Meaning" is a notable contribution to empiricistic analysis. But so far

¹⁵ *Ibid.*, p. 55.

¹⁶ *Philosophy of Science*, pp. 467–68. 'Thing-language' is identified with "that language which we use in every-day life in speaking about the perceptible things surrounding us." See *ibid.*, p. 466.

as physicalism is concerned, it would appear to mark the withdrawal of any thesis for which that name would be peculiarly appropriate, in favor of a doctrine which, in its general tenor and apart from details, must be acceptable to adherents of almost any empiricistic theory of knowledge.

James, and pragmatists in general, would certainly not be willing to be identified with any such doctrine as physicalism in the form in which it was announced in *The Unity of Science* and in earlier writings of the logical positivists. On this point, question of approximation of the two movements would depend upon the extent to which the radical nature of the revision which I seem to find in "Testability and Meaning" really characterizes the present position of the logical positivists.

If there is any 'translation' or 'reduction' of synthetic statements in general of which pragmatists would approve, it would not be into the language of physics but into the language of experience. If the pragmatic position were to be expressed in a fashion comparable to the logical-positivistic account, it might, I think, be roughly indicated as follows:

- (1) The universal language, to terms of which all meaningful statements of matters of fact are reducible, is the language of direct experience, of actual and possible empirical confrontations.
- (2) The reduction of any physical statements, or of any assertion of objective fact, to terms of experience would be given by the formulation of its possible confirmations.
- (3) Single constituents of this reduction of statements of objective fact to terms of experience would, in general, be hypothetical in form, because (a) the *conditions* of a possible confirmation may not exist when the statement is made or entertained, and in particular (b) possible confirmations characteristically depend upon an activity of the subject, as is suggested by such words as 'experiment' and 'test,' commonly applicable to instances of confirmation.

It is by reference to some such thought as is suggested in (b) that pragmatism is an activistic, instrumentalist conception. It would also be in point that, as has been indicated in Part I, there would be question whether what might figure as 'language of direct experience' in a pragmatic account would coincide with what is intended by 'observation-sentences' in logical positivism.

Pragmatism would not favor the imposition upon significant statements in general of those restrictions which particular sciences impose

upon themselves—and commendably so—in the interests of economy. The term 'science' can be, and often has been, given the wide meaning in which it signifies merely what is verifiable and thus coincides with 'empirical knowledge' in general. Since pragmatists tend to identify what is significantly assertable as objective fact with that for which some conceivable verification could be specified, they can be numbered amongst those who hold all that is objectively factual as belonging to the field of science in this wide sense of the word. But if 'science' be restricted to a narrow meaning, connoting some special technique of investigation, or some special mode of formulation such as 'physical language' or 'quantitative determination of a coefficient of physical state,' then as the quotation from James serves to indicate, they would not admit such universality of science. Rather, they would regard science in any such narrow sense as one mode of interpretation amongst many which are equally valid and equally faithful to that content and character of experience which, in the last analysis, all statement of objective fact must concern. And if they recognize that science represents a peculiarly desirable form of knowledge, such recognition would be on the ground of human interests which are felt to be especially frequent or exigent, such as the interests in prediction and in control of the environment. And they would also be likely to emphasize, as James does, that however important the interests served by science, there are also other interests which are comparable in importance; and they would deny exclusive significance, or perhaps even preeminence, to the scientific formulation of truth.

III

We have so far said nothing concerning the special question whether metaphysical statements are meaningful. It is plain without discussion that pragmatists and logical positivists would not be in agreement on this point. Peirce identified himself with a metaphysical position which is a form of pan-psychism or objective idealism. James criticized absolute idealism not as meaningless but as false; and argued not only for realism and pluralism but also for the significance and possible truth of various more speculative metaphysical assertions—as in "The Will to Believe" and "The Energies of Men." If Dewey ordinarily eschews metaphysical questions and exhibits toward certain metaphysical theses—such as those of Platonism—an attitude somewhat approximating to that of the logical positivists, at least he is definitely a realist, and could not plausibly be interpreted as denying significance to all metaphysical issues.

It is questionable how far the contention that metaphysical state-

ments are without significance is capable of profitable discussion, in view of the vagueness and ambiguity of the term 'metaphysics.' We can, perhaps, roughly distinguish two meanings of that term which are exemplified in common usage. First, it is used to cover statements about reality or nature or experience which have a high degree of generality and whose credibility is supposed to be capable of determination mainly or wholly by reflection and without recourse to any particular and singular statements of fact which would serve as verification or confirmation of them. Second, it has been used to cover statements regarded as altogether incapable of proof or of disproof by empirical findings, and likewise indeterminable by logical analysis. An example of the first sort would be "There are causal laws governing natural events"; of the second, "There is another life beyond this."

Those who have made use of the title 'metaphysics' in the first sense would differ greatly amongst themselves as to the manner in which they suppose such theses to be capable of support. Some would conceive that such questions are capable of solution mainly or exclusively by analysis of the meanings of terms: for example, that the assertion of causal law could be established by logical principles once we should become sufficiently clear what is approximately meant by 'cause' and by 'event in nature,' or that any further premises, beyond logical principles, which would then be needed for support of this statement would be such as can be taken without proof, such as "There are events after one another in time" or "We have experience of objects." One variant of such conception—still sticking to our example—would be a position like that of Kant, who takes the premise of events in time to be synthetic but *a priori*, and the premise of our experience of objects as setting a condition within which alone there would be problems to discuss. Another variant of this general conception would be the notion that whatever assumptions are requisite to such metaphysical assertion are pragmatically compelled. This position would be exemplified by those who regard an assumption called "the uniformity of nature" as requisite to the assertion of causal law, and as a synthetic and indemonstrable statement in the absence of which science would be impossible. Still another variant, of course, would be the position of the skeptic, who regards such statements as significant and even highly important but altogether indemonstrable.

Still others who maintain theses which are metaphysical in this first sense would regard them frankly as hypotheses which, better than any alternative assumption, explain and are confirmed by empirical findings in general. The critical realists exemplify this position.

An objective examination of theses of this sort labeled 'metaphysical,'

and of positions taken with regard to them, would, I think, reveal that the presumption that they can be established completely *a priori* has been relatively infrequent; appeal to experience in some sense is usually implicit if not explicit. But a reasonable justification of the distinction of 'metaphysical' from 'physical' or from 'scientific' theses would here be found in the consideration that, with respect to such theses, appeal to single experiment or observation, or even to any set of them which a scientist might perform, would be pointless—either because what is in question is something which, so far as it is empirically ascertainable, is sufficiently evident to everybody; or because induction from a few instances would be futile for a question of such magnitude; or for both of these reasons.

Some meaning of the general sort suggested would, I believe, be found to be the best justified by history of use of the term 'metaphysics' in philosophic discussion. And it is sufficiently evident that no one who discusses the general problems of knowledge or of science can avoid such questions. Consonantly, I think the most appropriate form of the assertion intended by "Metaphysical statements are significant" would be "There are questions with respect to which some decision must be made in the interest of any theory of science or of knowledge in general, or of the character of experience in general, with respect to which any limited set of experiments or observations, such as those of the natural sciences, is either unnecessary or is futile or is both." In that sense, metaphysics is an unavoidable problem of human reflection; and it is obvious that the logical positivists do not avoid it—for example, in the physicalistic assertion, in its earlier form at least, and in the assumption of causal law. Perhaps it would be just to observe that the precise nature of the kind of corroboration they would offer for such theses is left a little obscure in their discussions, and that further elucidation of that matter by them would be appreciated by many readers.

It is a reasonable supposition that not all the problems labeled 'metaphysical' in some meaning of the sort suggested are of the same type. Some of them may have the character which the logical positivists suggest: that of false problems created by inappropriate modes of thought and of language. Time out of mind, some metaphysicians have accused others of such verbalism, and it would be surprising if where there has been so much smoke there should be no fire. But would it not be equally or more surprising if all such problems are solely created by such misconception? Even the thesis of logical positivism—that all legitimate problems of the sort labeled 'philosophical' are capable of solution by

logical analysis alone—wants defending, and is a thesis of just the sort which is in question. Obviously this statement itself is not one which can be established by logical analysis. There is some implicit reference here to 'all that is to be met with,' if not to 'all reality,' which seems to set the conditions for determining the truth of this thesis.

A different type of statement commonly classified as 'metaphysical' is that which is also commonly characterized as 'speculative.' Some of these—for example, those made by physical determinists, by vitalists, and by emergent evolutionists regarding the phenomena of life—are of a sort which seek to anticipate what the future development of science would alone be sufficient to determine. While labels are relatively unimportant, probably we should agree that it is confusing and undesirable to call such statements 'metaphysical,' since that would be incompatible with any valid distinction between metaphysics and the special sciences. Another kind of such speculative statements, however, are distinguished by the fact that they are incapable of proof or disproof by scientific methods. Notable examples are the assertion of another life beyond this, of a power determining the direction of natural evolution toward the humanly desirable, of the existence of consciousness without physical embodiment. To deny that such statements have meaning would be a position too egregious to be taken by anyone. One remembers that Schlick has said that the question of immortality is an empirical question—hence significant.¹⁷ The sense in which it is empirically verifiable, if true, is obvious. And the sense in which it is unverifiable and therefore speculative is equally obvious. But the sense in which it is unverifiable plainly precludes it from the field of any of the natural sciences. It happens that, with the notable exception of James, pragmatists, like logical positivists, have not been much given to discussion of such questions. But if these are recognized to be significant, then it seems required to remark the existence of a class of statements, commonly labeled 'metaphysical,' which have meaning but are nevertheless not verifiable under human conditions, and do not belong to the field of science.

IV

It is with respect to problems of evaluation and of ethics that the contrast between logical positivism and pragmatism is strongest. The repudiation by logical positivists of normative ethics does not forthwith mark such a contrast; whether it does so or not would depend

¹⁷ See "Meaning and Verification," in *Philosophical Review*, Vol. XLV, pp. 356-57.

upon what is here meant by 'normative.' Pragmatism is not a doctrine of ethics, and there is no reason to assume agreement amongst pragmatists on all points of ethical theory. But if 'normative ethics' should apply exclusively to the conception that moral standards are determinable *a priori* and without reference to empirical matters of fact, then since pragmatists are empiricists, there is ground for presumption that they would agree in repudiating such conception. Rather, the point of contrast would be with respect to the relation conceived to hold between judgments of value and judgments of fact. Pragmatism is an activist, an instrumentalist conception; it could be characterized as the doctrine that all problems are at bottom problems of conduct, that all judgments are, implicitly, judgments of value, and that, as there can be ultimately no valid distinction of theoretical from practical, so there can be no final separation of questions of truth of any kind from questions of the justifiable ends of action.

While James wrote little directly upon the topics usually comprised in theoretical ethics, the whole body of his writing is colored throughout by a sense of the human problems of the good life and the validity of ideals. And concerning development of his own conceptions, Dewey has written:

"I became more and more troubled by the intellectual scandal that seemed to me involved in the current (and traditional) dualism in logical standpoint and method between something called 'science' on the one hand and something called 'morals' on the other. I have long felt that the construction of a logic, that is, a method of effective inquiry, which would apply without abrupt breach of continuity to the fields designated by both these words, is at once our needed theoretical solvent and the supply of our greatest practical want. This belief has had much more to do with the development of what I termed, for lack of a better word, 'instrumentalism,' than have most of the reasons that have been assigned."¹⁸

In contrast to this, Carnap has written:

"The word 'Ethics' is used in two different senses. Sometimes a certain empirical investigation is called 'Ethics,' *viz.* psychological and sociological investigations about the actions of human beings, especially regarding the origin of these actions from feelings and volitions and their effects upon other people. Ethics in this sense is an empirical, scientific investigation; it belongs to empirical science rather than to philosophy. Fundamentally different from this is ethics in the second

¹⁸ *Contemporary American Philosophy* (New York, 1930), Vol. 2, p. 23.

sense, as the philosophy of moral values and moral norms, which one can designate normative ethics. This is not an investigation of facts, but a pretended investigation of what is good and what is evil, what it is right to do and what it is wrong to do.

"A norm or rule has an imperative form, for instance: 'Do not kill!' The corresponding value judgment would be: 'Killing is evil.' . . . But the value statement, 'Killing is evil,' although, like the rule, it is merely an expression of a certain wish, has the grammatical form of an assertive proposition . . . and must be either true or false. Therefore they give reasons for their own value statements and try to disprove those of their opponents. But actually a value statement is nothing else than a command in a misleading grammatical form. . . . It does not assert anything and can neither be proved nor disproved."¹⁹

In the longer statement by Schlick, in his *Problems of Ethics*, the terms 'norm' and 'normative' are used in a different way; nevertheless there is substantial—though not verbal—agreement in the conclusions: "When I recommend an action to someone as being 'good,' I express the fact that I *desire* it" (p. 12). A rule or norm, correctly considered, "gives us only the conditions under which an act or disposition or character is actually called 'good'" (p. 15). The questions, "When is a person judged to be good?" "Why is he judged to be good?" admit of factual and scientific answer. But the questions, characteristic of normative ethics as often conceived since Kant, "With *what right* is that person judged to be good?" "What is valuable?" "What should be valued?" are not similarly meaningful (see p. 17). "On the other hand, the question what actually is desired for its own sake is of course quite sensible, and ethics is actually concerned only with answering this question" (p. 19).²⁰

The conception that value-statements are, along with metaphysical statements, merely expressive and neither true nor false, and on the other hand, the conception that they are capable of some *a priori* justification, by no means exhaust the possibilities. An omitted alternative is the essentially empiricistic conception that value-judgments are verifiable in the same general manner as are judgments of other qualities. From this third point of view it would be recognized that the ultimate reference of judgments of value is to value-qualities given, or capable of being found, in direct experience, just as the ultimate reference of predications of non-value properties is likewise to the qualities given

¹⁹ *Philosophy and Logical Syntax* (London, 1935), pp. 23–24.

²⁰ David Rynin, trans. (New York, 1939).

or capable of being found in direct experience. But recognition that the final test of the correctness of a value-judgment is thus empirical, and not *a priori*, no more impugns their objective significance than does the similar recognition that the final test of physical statements is by reference to data of direct experience impugn the objectivity of physics. Nor does this third and empiricistic point of view imply that generalizations concerning values are merely psychological or sociological—unless physics is equally a branch of psychology or of sociology. At an earlier date, Carnap himself indicated the possibility of such empiricistic conception:

“Die Konstitution der Werte aus gewissen Erlebnissen, den ‘*Werterlebnissen*,’ zeigt in mehrfacher Hinsicht eine Analogie zur Konstitution der physischen Dinge aus den ‘*Wahrnehmungserlebnissen*’ (genauer: aus den Sinnesqualitäten). . . . Das bedeutet keine *Psychologisierung der Werte*, so wenig wie die Konstitution der physischen Gegenstände aus Sinnesqualitäten etwa eine Psychologisierung des Physischen bedeutet.”²¹

Nor does such an empiricistic conception of the status of value-judgments remove the difference between the determination of what is valuable and the (psychological or sociological) determination of what in fact is valued or of what is experienced with felt satisfaction. It may be admitted that the ultimate test of correctness of a value-judgment is by reference to the quality with which the thing in question is, or could be, experienced, without in the least implying a subjective or merely ‘expressive’ character of value-statements. The analogy to objective predication of other properties than value is, on this point, obvious. The statement that something is large, or is red, can have no other test of its correctness than, finally, by reference to the manner in which it is or may be experienced; to the observable quality characters with which it is presented. But the judgment that a thing is large, or is red, is nevertheless true or false; and the determination of such truth or falsity is not a problem of psychology or of sociology—unless, as has been said, all problems of truth or falsity are such. That a thing is valuable or desirable, no more means, from the empiricistic point of view suggested, that it is now valued by someone, or is felt with satisfaction by someone, than does the statement that a thing is red mean that someone now judges it to be red or sees it as red. We cannot quarrel with the immediate observation of what is presented—with the report of felt satisfaction or of seen redness—but that fact in no wise removes the question whether the thing observed has the color

²¹ *Der Logische Aufbau der Welt*: (Berlin-Schlachtensee, 1928), pp. 203-04.

red, as could be further verified; nor the question whether it has the property of being 'valuable.'

Questions of *moral* evaluation—of acts, characters, persons—are admittedly of another and more complex kind. With respect to these, pragmatists would be likely to agree with Schlick that the validation of standards or norms is secondary to, and derivative from, an antecedent determination of goodness in that toward which conduct is directed; that is, they would be likely to agree that the indicated test of any principle or standard of conduct is by reference, eventually, to the consequences of conduct conforming to that standard, and in terms of actual or possible felt satisfactions. But again, that admission does not remove the question of the validity of such norms. Correspondingly, the standards of correct procedure in making a physical determination have reference, eventually, to the consequences of laboratory conduct conforming to these standards, and to whether these consequences are good or bad. But that fact, so far from making the question of the correctness of scientific procedure one about the psychology of scientists, or about their social connections, is precisely what distinguishes this question from any which is psychological or sociological and makes it objective.

Objective truth of *any* sort has imperative significance for conduct: crudely put, the significance that those who act upon it will prosper, and those who do not will wish that they had. And if it should be observed that such imperative significance, implicit in statements of fact, is hypothetical only (not categorical), then it should be further observed that a hypothetical imperative becomes categorical whenever the hypothesis of it is satisfied, and that one the hypothesis of which never is or could be satisfied is indeed non-significant.

Norms are, or should be conceived to be, standards or principles of correctness. All correctness and incorrectness has to do with actions, and with consequences of actions, and with some species of value of these consequences. The conception that determinations of correctness and incorrectness are subjective, and statement of them merely 'expressive,' or that they fall exclusively within the province of psychological and sociological description, is inadmissible, because such admission would erase the distinction between valid and invalid, and eventually between truth and untruth. When we determine truth, we determine that which it is correct to believe and that upon which it is desirable (not merely desired) to act. There is correctness and incorrectness of belief because believing is itself a decision, and one whose significance is found in the control by it of other modes of action. And whoever

should say, "When I speak of something as correct to believe and act upon, I express merely my wish that you and others should believe it and act upon it," would adopt an attitude which releases others from taking him seriously—except as an obstacle to the business in hand.

For the pragmatist, there can be no final division between 'normative' and 'descriptive.' The validity of any standard of correctness has reference to some order of 'descriptive facts'; and every determination of fact reflects some judgment of values and constitutes an imperative for conduct. The validity of cognition itself is inseparable from that final test of it which consists in some valuable result of the action which it serves to guide. Knowledge—so the pragmatist conceives—is for the sake of action; and action is directed to realization of what is valuable. If there should be no valid judgments of value, then action would be pointless or merely capricious, and cognition would be altogether lacking in significance.