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The Pragmatist Theory of Truth

Author(s): Susan Haack

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The Pragmatist Theory of Truth

by SUSAN HAACK

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I INTRODUCTION

How can the mere pragmatist feel any duty to think truly?

(Royce)

My failure in making converts to my conception of truth seems, if I may judge from what I hear, . . . almost complete. An ordinary philosopher would feel disheartened, and a common choleric sinner would curse God and die, after such a reception. But instead of taking counsel of despair, I make bold to vary my statements, in the faint hope that repeated drippings may wear upon the stone.

(James, 'A Word More About Truth' in his [1909], p. 136)

James's pessimism was amply justified; the unpopularity of the pragmatist theory of truth has persisted, at least on this side of the Atlantic, to the present day. The following passage is typical:

William James, the originator of the [pragmatist] theory [of truth], took over the central idea from C. S. Peirce (*sic*), but altered it in the process. Peirce had put forward practical usefulness as a criterion of meaningfulness . . . James applied this idea (perhaps confusedly) to truth in the attempt to provide a down-to-earth substitute for certainty within the theory of knowledge. But merely to reject the search for certainty by putting something less in its place without diagnosis of the reasons for the demand for certainty in the first place is to some extent an abrogation of the philosopher's responsibility. The pragmatic theory cannot therefore be put on the same level as the . . . correspondence and coherence theories. I shall not discuss it further. (It would not be unfair to say that it is founded on a muddle.)

(Hamlyn [1970], p. 119)

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Every sentence of this passage, with the single exception of 'I shall not discuss it further', is either false or seriously misleading. Peirce, not James, originated the pragmatist theory of truth; Peirce's theory of meaning does not equate significance with practical usefulness, and neither does James's theory of truth straightforwardly equate truth with practical usefulness; Dewey provided in his [1929] a particularly acute diagnosis of the classical quest for certainty; and the pragmatist theory of truth contains substantial coherence and correspondence elements.

It would, I fear, be generous to describe Hamlyn's account as founded on a muddle; and I shall not discuss it, at least directly, further.

What I hope to do, though, is to convince you, by showing that the most influential criticisms have been based on a very inadequate understanding of the theory, that this kind of dismissive attitude is unjustified. The pragmatist theory of truth is not, to be sure, without difficulties; but there is, I think, a good deal to be learned from it, both from its strengths and from its weaknesses. It is, at any rate, of sufficient interest amply to repay the effort of setting the historical record straight.

2 SKETCH OF THE THEORY

By 'the pragmatist theory of truth' I shall understand a set of interlocking theses, to be found in the works of Peirce, Dewey and James, which may together be regarded as constituting a theory of truth. (I shall not consider the views of Schiller.) Not all these theses will be found in all three writers, but most of them will be found in at least two, though with varying emphasis. There are dangers, of course, in speaking of '*the* pragmatist theory of truth' at all, for there are interesting and important differences between the pragmatists on these issues. But I hope that a joint treatment will enable me to establish, first, that the theory originally offered by Peirce and subsequently adopted by Dewey was considerably extended by James, that it was upon James's version of the theory that the most influential criticisms fell, and that many of these criticisms can be seen to be misguided once James's views are placed in the context of the underlying Peircean theory; and second, that some of the differences between Peirce's and James's versions can be seen as resulting from their different reactions to an internal tension in the common part of their theory. I shall restrict myself to consideration of the truth of straightforwardly factual beliefs; the application of the theory to, for example, mathematical or metaphysical beliefs would require a detailed account of the pragmatists' views on mathematics and metaphysics.

For Peirce, truth is the end of inquiry. Here 'end' is ambiguous, between

'aim' and 'final state'. This ambiguity gives rise to some difficulty, but for the present I leave it as it stands. Peirce's theory of inquiry goes, in outline, as follows: a person in a state of (real, not Cartesian) doubt, struggles to attain instead a state of fixed belief. Peirce argues that some methods of acquiring beliefs—the method of tenacity, the method of authority, and the *a priori* method—are unsatisfactory because they are inherently unstable. A person using one of these methods will acquire an opinion, but different people will thereby acquire different opinions, and the existence of rival opinions will raise doubt all over again. Only one method, the Scientific Method, is stable; enables one, that is, to acquire a belief that will not be shaken.

The Scientific Method, alone among methods of acquisition of beliefs, has this virtue, because it is constrained by Reality, which is independent of our beliefs about it. Beliefs acquired by the use of the Scientific Method are caused by Real Things; so the use of the Scientific Method cannot but lead, eventually, to a stable consensus.

Since inquiry is prompted by doubt, and ended only with the acquisition of a stable belief, and since the Truth is that stable consensus which the Scientific Method will eventually achieve, it follows that the true is, in a certain sense, satisfactory to believe; satisfactory because stable. (Since Peirce's theory of belief is behaviourist, this satisfactoriness is, in a way, 'practical'.)

James pays little attention to the theory of inquiry. He agrees that truth is correspondence with reality, but, even more vehemently than Peirce, insists on knowing what difference a belief's correspondence with reality might make. His major contribution is thus a substantial extension of the third thesis, that the truth is satisfactory to believe. The benefit of holding true beliefs, according to James, is that if what one believes is true one is, so to speak, guaranteed against recalcitrance on the part of experience. No doubt one could get along perfectly well, for a bit, holding false beliefs; but, James thinks, one would eventually be caught out.

This provides a sensible interpretation of those, perhaps, incautious remarks of James's which Moore found 'silly', that:

The true is the name of whatever proves itself to be good in the way of belief . . .
(*'What Pragmatism Means'*, in [1907], p. 59)

and

The true . . . is only the expedient in our way of thinking.
(*'Pragmatism's Conception of Truth'* in [1907], p. 145)

By beliefs which are 'good' or 'expedient' or which 'pay' James means beliefs which are safe from the danger of inconsistency with subsequent

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experience. That this is a fair interpretation becomes clear from the following passages, the first appearing shortly after the identification of the true with the good to believe, the second immediately after the identification of the true with the expedient to believe:

... what is better for us to believe is true *unless the belief incidentally clashes with some other vital benefit*. Now in real life what vital benefits is any particular belief most liable to clash with? What indeed except the vital benefits yielded by other benefits when these prove incompatible with the first ones?

... expedient in the long run and on the whole of course; for what meets expediently all the experience in sight won't necessarily meet all farther experience equally satisfactorily. Experience, as we know, has ways of *boiling over*, and making us correct our present formulas.

So, for James as for Peirce, the true is satisfactory (useful, expedient, good) to believe, because it is safe from overthrow by subsequent experience. James, however, amplifies this thesis by an account of the way one modifies, in the face of inconsistency with a new experience, the beliefs one previously held true; one aims to maximise the conservation of the old belief set while restoring consistency. The likeness to Quine's epistemology ([1951]) is striking.

True beliefs, James frequently comments, are those which are verifiable. By this he means that those beliefs are true which, in the long run, are corroborated or confirmed by experience. (He does not distinguish corroboration from confirmation, as subsequent writers have done.) Most of the beliefs we take to be true are, James admits, actually verified at best only very indirectly. Our beliefs are like banknotes, they 'pass' so long as no-one challenges them; but, once again like the financial system, the system of beliefs would collapse were it not for actual direct verifications at some points.

I have so far stressed the similarities between Peirce's and James's view. But there is a difference of emphasis which it is important to consider. Peirce is preoccupied with the Truth, that is, the totality of individual truths. James, by contrast, is primarily interested in the individual truths, finding the Truth with a capital T a somewhat spectral and uninteresting abstraction. He is aware that one *could* say that some propositions just are true (or false) even though no-one has ever verified (or falsified) them or, indeed, even entertained them; but he finds this way of talking relatively *pointless*. (This view bears some resemblance to Dummett's rather stronger, Intuitionist view of truth in his [1959].) In fact James quite often insists that the Truth is growing corpus, that is, that new truths come into existence as human knowledge grows. This emphasis on the growth of truth can be understood as a consequence of James's switch of Peirce's

emphasis on *the totality of truths in the long run* to an emphasis on *individual truths in the short run*. This difference of emphasis can probably be traced in its turn to the contrast between Peirce's realism and James's nominalism: Peirce did not share James's antipathy for abstractions. His nominalism also underlies James's tendency to prefer to speak of actual verifications, where possible, rather than verifiability (unactualised possible verifications being somewhat embarrassing to a nominalist). This tendency, as I shall argue subsequently, gets him into a serious difficulty.

The same difference of emphasis is reflected in another feature of James's presentation. At any particular time, James argues (short of the fictional Long Run, that is) the evidence available to us may be insufficient to decide between competing beliefs; and then our choice *will* be a matter of taste:

... sometimes alternative theoretic formulas are equally compatible with all the truths we know, and then we choose between them for subjective reasons ... we follow 'elegance' or 'economy'.

(*'Pragmatism's Conception of Truth'*, in his [1907], p. 142)

Indeed, in at least one place (*'What Pragmatism Means'*, in his [1907] p. 44) James refers to the possibility that, even after *all* the data are in, alternative theories, between which we should choose on such 'aesthetic' grounds as simplicity, economy *etc.* may remain. Although the resemblance to Quine's epistemology is, once again, striking, two points of contrast should be noted. First, Quine takes it that there could be a real difference between two such theories, whereas James, I think, would rate the difference merely verbal; second, Quine would not, I think, so readily admit that considerations such as simplicity and economy are *purely* subjective. Both points will be relevant in later parts of the paper.

Dewey follows Peirce in stressing that truth is the end of inquiry, though he adds considerably to the theory of inquiry. In *Logic, the Theory of Inquiry* ([1938], p. 345 n.) he simply quotes Peirce's as 'the best definition of truth'; Dewey prefers to replace the word 'truth' by 'warranted assertibility' to emphasise that the truth is precisely what the method of inquiry warrants us in asserting.

Dewey contributes to the theory an important insight into the role of truth. Truth, or warranted assertibility, characterises those beliefs to which we give the honorific title, 'knowledge'. It has subsequently been commonplace (though not, of course, uncontroversial) to analyse '*x* knows that *p*' along the lines of '*x* believes *p*, *p* is true and *x* has good reasons for his belief that *p*'. Dewey, interestingly enough, *merges* the truth with the warrant requirement.

The central thesis of the theory may be summarised thus:

Truth—

is the end of inquiry	}	Peirce	}	James	}	Dewey
is correspondence with reality						
is satisfactory to believe						
is coherence with experience—verifiability						
[is a growing corpus]						
entitles belief to be called 'knowledge'.						

3 SOME REPLIES TO SOME CRITICS, AND SOME NEW CRITICISMS

(a) *A definition or a criterion of truth?*

Some early critics suggested that the pragmatists had confusedly presented a criterion of truth as though it were a definition of truth; that their theory provided at best, a test of truth, but was offered as if it gave an analysis of the meaning of 'true':

The test of truth and the meaning of truth are . . . completely identified
(Pratt, *What is Pragmatism?* [1909], p. 89)

. . . if pragmatists only affirmed that utility is a *criterion* of truth, there would be much less to be said against their view . . . The arguments of the pragmatists are almost wholly directed to proving that utility is a *criterion*; that utility is the *meaning* of truth is then supposed to follow.

(Russell, 'James's Conception of Truth', [1908], p. 121)

Interestingly enough, the same distinction is used by Rescher in *The Coherence Theory of Truth* ([1973]), where he tries to give, as he thinks, a more sympathetic account of the pragmatist theory by presenting it as precisely, a criterion, but not a definition, of truth.

But these criticisms, and Rescher's attempted rehabilitation, are both inappropriate. For the pragmatists' view of meaning is such that a dichotomy between definitions and criteria would have been entirely unacceptable to them. It is a fundamental tenet of pragmatism (Peirce sometimes says, *the* fundamental tenet) that meaning is given by reference to experiential consequences. Thus, Peirce:

. . . consider what effects, which might conceivably have practical bearings, we conceive the object of our conception to have. Then, our conception of those effects is the whole of our conception of the object.

. . . let us ask what we mean by calling a thing *hard*. Evidently that it will not be scratched by many other substances. The whole conception of this quality, as of every other, lies in its conceived effects.

('How to make our ideas clear', [1878], p. 124)

and James:

There can *be* no difference that *makes* no difference

('What Pragmatism means', in [1907], p. 45)

This view of meaning raises many interesting issues (its relation to Logical Positivism and Operationalism, for instance, and its role in persuading C. I. Lewis of the need for an implication relation stronger than the material conditional); but for present purposes it is sufficient to notice that it certainly does not allow a distinction between what 'true' means, and what difference it would make, whether a sentence were true or false. The pragmatists hoped to explain what 'true' means precisely by investigating what difference it makes whether one's beliefs are true or false. As James puts it:

Pragmatism . . . asks its usual question. "Grant an idea or belief to be true", it says, "what concrete difference will its being true make in any one's actual life? How will the truth be realised? What experiences will be different from those which would obtain if the belief were false? What, in short, is the belief's cash-value in experimental terms?"

(*'Pragmatism's Conception of Truth'*, in [1907], p. 133)

So the criticism that the pragmatists 'confuse' definition and criteria is totally inappropriate, since their theory of meaning quite deliberately equates the two; if this *is* a confusion, it must be shown, by a critique of their theory of meaning, *why* it is. I shall argue, later, however, that Peirce's equation of definitions and criteria does lead to a difficulty because of his fallibilist epistemology.

*(b) Truth and utility*¹

Both Moore and Russell find James's equation of the true with the useful thoroughly unacceptable. They both assume that 'useful' has its usual, everyday sense, and proceed to argue, on the one hand, that some true beliefs can fail to be useful, and on the other, that some useful beliefs can fail to be true. It is notable that Moore and Russell are both assuming, in making this kind of criticism, some other, presumably plain correspondence, theory of truth.

Is it not clear that we do actually sometimes have true ideas, at times when they are not useful, but positively in the way?

(Moore, 'William James' "Pragmatism"', [1908], p. 110)

It seems perfectly possible to suppose that the hypothesis that [other people] exist will always work, even if they do not in fact exist. It is plain . . . that it makes for happiness to believe that they exist . . . But if I am troubled by solipsism, the discovery that a belief in the existence of others is 'true' in the pragmatists' sense is not enough to allay my sense of loneliness.

(Russell, 'James's Conception of Truth', [1908], p. 122)

I have argued in section 2 that when James says that true beliefs are

¹ Cf. Perkins [1952] and Hertz [1971].

'useful' he should be understood to mean that they are so in the sense of being guaranteed against overthrow by subsequent experience. Neither Moore's nor Russell's criticisms are to the point if this *is* what James meant. And there are—besides the passages I have referred to as confirming my interpretation—also passages where James repudiates the thesis which Moore and Russell attribute to him. He observes, for example, that a belief in the Absolute would afford him a kind of 'moral holiday', that is, that it would be good, in the sense of congenial, to believe; but he rejects this belief, nevertheless, on the grounds that it would be inconsistent with 'other [*sic*] truths'. ('What Pragmatism means' in [1907], p. 61). And compare this comment:

Above all we find *consistency* satisfactory.

('The Pragmatist Account of Truth and its misunderstanders', in [1909], p. 192)

James perhaps comes closest to the view which Moore and Russell attribute to him in his discussions of religious belief, about which he is apt to say that that belief is true which best succeeds in making coherent both one's experiences and one's values. And even here, clearly, he is by no means straightforwardly maintaining that truth is a matter of taste or (in the ordinary sense) expediency; rather, he is extending his coherence view to moral as well as empirical beliefs.

The pragmatists' view of the truth as the satisfactory to believe has deep roots in Peirce's epistemology. Peirce's theory of inquiry rests, as I have reported, on the idea that the state of doubt, of not knowing, that is, whether *p*, is uncomfortable, that it prompts inquiry, and that the discomfort of doubt is ended by the acquisition of a stable belief. This idea in its turn is supported by definitions, due in essentials to Alexander Bain, of belief as a habit of action and of doubt as the interruption of such a habit by novel stimuli. I cannot enter, here, into the question of the adequacy or otherwise of these underlying views, except to comment that Peirce's theory of doubt does not seem to take much account of the fact that doubt or ignorance on some issues may occasion one much less discomfort than doubt or ignorance, on others with which one is—to put it, I fear, question-beggingly as well as vaguely—concerned. Ironically, since the pragmatists are so often accused of excessive attention to the merely and vulgarly practical, this comment suggests that Peirce's theory may pay rather less attention to the practical than it should. And this difficulty suggests another: that the theory may be hard put to it to handle the question of the truth-value of propositions which have never been entertained. This, too, will turn out to be significant.

(c) *Truth and verifiability*

Since, as I have argued, they did not appreciate the relation between utility, in James's sense, and coherence with the totality of experience, it is not surprising that Moore and Russell also failed to appreciate the close connection between James's claim that the true is the useful, and his claim that the true is the verifiable. But, though they did not appreciate the connection between the two views, they objected to the identification of truth with verification nearly as vehemently as to the identification of truth with utility, and on similar grounds; a belief could be true but never verified. Now there is a view in James which is not straightforwardly vulnerable to this objection: the view, that is, that a belief is true just in case it is *verifiable*. If James is equating truth with verifiability, not with verification, the objection that there are true but unverified beliefs is irrelevant. And there are numerous passages where James concedes that plenty of true, that is to say *verifiable* beliefs, have not yet been verified (e.g. 'Pragmatism's Conception of Truth', in [1907] pp. 136–7). Of course, there will still be room for argument about the identification of truth with verifiability, *à propos*, for example, undecidable mathematical or quantum mechanical sentences—argument which will not be made easier by James's rather vague gloss on 'verifiable': if *p* were to be tested it would, eventually, be verified; but at least this thesis does not fall to the simple objections of Moore and Russell. (There is, once again, a similarity to Dummett's views.)

However the matter is considerably more complicated than has yet appeared. As I reported in section 2, James's nominalistic embarrassment about the notion of possible verification in the long run leads him to try to replace 'verifiable' by 'verified' whenever he can, and, in consequence, to maintain that the Truth is a growing corpus, which individual truths join as they are verified. But if a belief is true just in case it is *verifiable*, all these individual truths are true *before* they are verified (which is what James plainly says in his [1909] p. 165); so the Truth consists always of the same truths, and does not, after all, grow. This is, I think, a simple inconsistency in James's view; that is why, on page 236, I relegated the thesis that the Truth is a growing corpus to brackets.

(d) *The pragmatist theory and the T-schema*

It seems worth observing that the admission of the thesis that the Truth grows—against which I have been arguing above—would make the pragmatist theory inconsistent with Tarski's material adequacy condition for theories of truth. Tarski requires (in [1931]) that any acceptable theory should entail all instances of

(*T*) *S* is true iff *p*
 (where '*S*' names *p*).

In what follows I shall consider only the weaker condition, that any acceptable definition of truth should be consistent with the truth of all instances of (*T*); for it is in this form, rather than the stronger condition that all instances of (*T*) be deducible, that Tarski's material adequacy requirement can conveniently be applied to informal truth-definitions. It is not certain that this material adequacy requirement rules out what one might not too unfairly call 'bizarre' theories of truth—such as, say, 'true = asserted in the Bible'; since presumably a serious advocate of such a theory would maintain that *e.g.*

'Warsaw was bombed in 1940' is true iff Warsaw was bombed in 1940 holds, since if he agrees that the lefthand side is false, he will also maintain, if he is wise, that the righthand side is false too. But what the material adequacy condition *does* seem to rule out are theories which are not bivalent, which allow that some sentences are neither true nor false. Thus, if one supposed, as Łukasiewicz did (though I do not) that 'There will be a sea-battle tomorrow' is neither true nor false in advance of the outcome, then

'There will be a sea-battle tomorrow' is true iff there will be a sea-battle tomorrow

is presumably not true, since its lefthand side would be false and its righthand side neither true nor false.

One could, indeed, make the rejection of bivalence consistent with the acceptance of the *T*-schema if one envisaged the adoption of a non-bivalent metalanguage as well as a non-bivalent object language. Thus, if '*p*' is true' is neither true nor false if '*p*' is neither true or false, '*p*' is true iff *p*' could be true even though '*p*' was truthvalueless. But to motivate this proposal some argument would be required why '*p*' is true' should be neither true nor false if '*p*' is neither true nor false. It seems doubtful whether, in the present case, one could find any very plausible argument to the desired effect. For that certain quantum mechanical sentences are neither verifiable nor falsifiable can itself be verified; so it would seem proper, if one identified 'true' with 'verifiable' at the metalinguistic level also, to admit that that such sentences are true, is false.

Now if one took the view which James sometimes maintains, that a belief becomes true when it is verified, then since at any time there will be beliefs not yet verified or falsified, those beliefs will be, at that time, neither true nor false.

That version which replaces 'verified' by 'verifiable', which, as I have argued, is to be preferred, may or may not be bivalent, depending upon

whether or not it is so interpreted as to allow the possibility that some meaningful sentences may be neither verifiable nor falsifiable, and hence, neither true nor false. Some sentences are *practically* incapable of verification or falsification; but it would be possible to maintain that such sentences are nevertheless verifiable or falsifiable, on the grounds that if they *were to be* tested they *would* be verified or falsified. Other sentences are *theoretically* incapable of verification or falsification; for instance certain sentences of quantum mechanics are such that it follows from the theory that they are neither verifiable nor falsifiable. It would be harder, though not perhaps quite impossible, to maintain that such sentences are nevertheless in some weaker ('logical') sense verifiable or falsifiable; but it remains possible to retain bivalence by denying the meaningfulness of these sentences.

Since James is rather unspecific about exactly how he understands 'verifiable' it is not easy to say what view he would have adopted on these questions. However, his theory of meaning would presumably rule that whatever sentences he counted as unverifiable he would also count as meaningless. And only if some meaningful sentences are allowed to be neither true nor false does the identification of truth with verifiability threaten to be inconsistent with Tarski's material adequacy requirement.

(e) *A subjectivist theory?*

Moore's and Russell's fears that pragmatism would make truth a mere matter of taste are, as I have argued, unfounded. However, the questions whether, and if so in what sense, the pragmatist theory is subjectivist, require further attention.

It is clear, to begin with, that all the pragmatists agree that truth is correspondence with reality. Even James makes the point quite explicitly:

[Truth] means [our ideas'] 'agreement' with reality'. Pragmatists and intellectualists both accept this definition as a matter of course.

('Pragmatism's Conception of Truth', in [1907], p. 133)

So far from denying the correspondence theory which their opponents championed, the pragmatists incorporate it as a part of their theory. But they are better aware than their opponents how inadequate, because unspecific, the formula of 'correspondence with reality' is as it stands.

Peirce frequently stresses that Reality is independent of human beliefs about it. Nonetheless, he manifests some embarrassment with his notion of Reality, since, as he is well aware, he can not prove that an external and independent Reality exists. As he puts it: since he uses the idea of Reality as the foundation for his theory of inquiry, he cannot use that theory to show that there is such a thing as Reality. However, he offers, in support

of the hypothesis of Reality the following, rather less than conclusive, considerations:

- (i) Inquiry leads to no doubt of the existence of such a Reality: so the theory and its under-pinning are in harmony.
- (ii) Doubt arises when one is undecided between a belief and its contradictory, which suggests that there is some *one* thing to which belief should conform.
- (iii) The extraordinary success of the Scientific Method in leading to consensus can hardly be an accident, and would be explicable on the hypothesis of Reality.

(The last of these arguments has an independent interest, since it seems to support the hypothesis that Peirce took his theory of Scientific Method actually to describe the methods of practising scientists.) There are, though, some passages where Peirce apparently turns his theory on its head:

... as what anything really is, is what it may finally come to be known to be in the ideal state of complete information ... reality depends on the ultimate decision of the community ...

('Some Consequences of Four Incapacities', [1868], p. 72)

Although in 'The Fixation of Belief' [1877] he sounds confident about the view that agreement depends on Reality, not *vice-versa*, in 'How to Make Our Ideas Clear', [1878] he comments that

The opinion which is fated to be ultimately agreed by all who investigate is what we mean by the truth, and the object represented by this opinion is the real. *That is the way I would explain reality.*

(p. 133, my italics)

James is less preoccupied with establishing the independence of reality, and more preoccupied with stressing that reality is experientially accessible:

The only *real* guarantee we have against licentious thinking is the circumpressure of reality itself, which gets us sick of concrete errors, whether there be a trans-empirical reality or not.

('Humanism and Truth', in his [1909], p. 72)

At this point it becomes essential to look, at least briefly, at the development of Peirce's view of reality. Although Peirce was an ontological realist at least since 1871, in his earlier work he did not accept epistemological realism, but subscribed, instead, to a kind of phenomenism. His ontological realism allows a reality independent of our thought about it, which, as a constraint on Scientific Method, guarantees the eventual agreement of which it is the object. But his phenomenism regards reality as merely a construction devised to order phenomena, which, since Peirce's doctrine that there are no incognisables ruled out appeal to possible but nonactual phenomena, could not allow there to be an 'object' of the final opinion

unless and until that final opinion is reached. In the 1870s Peirce tried to resolve this conflict by appeal to the infinite future; by the 1890s he had resolved it by rejecting phenomenalism (see Murphey [1961], especially pp. 169, 376–7, O'Connor [1964], and Haack [1975], for more detailed discussion of this development). After about 1890, then, Peirce combined ontological with epistemological realism, a doctrine of direct perception. James's pragmatism, however, was always nominalistic. It will be apparent by now that I should disagree with Scheffler's suggestion that the way James goes beyond Peirce is in applying the pragmatic maxim to truth as well as meaning; I should locate an important difference between Peirce and James, rather, in their account of reality (*cf.* Scheffler [1974], Howard [1975]). This, I think, supplies a better explanation of James's greater vulnerability to the charge of subjectivism.

Dewey's views have affinities with Peirce's later position. Dewey observes that pragmatism's opponents insist that truth is correspondence with reality, but then make that reality so remote and inaccessible that it becomes inexplicable how we should ever have the slightest reason to suppose that our beliefs correspond to it. A proper emphasis on the experiential character of reality will, Dewey thinks, serve to banish this mystery; correspondence with reality *is* coherence with the totality of experience.

The pragmatist theory of truth is certainly *not* subjectivist in the sense of identifying truth-for-me with whatever-I-happen-to-find-congenial-to-believe. The satisfactoriness of true beliefs consists in their correspondence with reality. But a further question then arises: how objective, on the pragmatist view, is reality?

It is here that an important tension in the theory begins to come to the surface. Peirce wishes to emphasise the externality and the independence of reality, for the sake of the objectivity of truth; but, though he would wish to hold that reality is independent of what anyone or everyone believes, he has difficulty in going beyond the weaker thesis that reality is independent of what any individual believes, but not of what the Scientific Community, as a whole and in the long run, believes. This tension arises because Peirce's theory of meaning identifies the sense of an expression with the criterion of its application, the meaning of 'true' in particular, with the criterion of truth. But Peirce doubts that we have certain ways of acquiring knowledge, or of knowing, if we do reach the truth, that we have done so; he is, in short, a fallibilist. This is why he feels the need to appeal to an independent—but, unfortunately, consequently inaccessible—reality, to close the gap which his fallibilism allows to open between the meaning of, and the criterion for, truth.

(Though Popper's account of the pragmatists' views leave a good deal to be desired, some remarks in his [1960] suggest that he has noticed this tension.) This tension in Peirce also manifests itself in his shifts between the thesis that the truth is what the Scientific Community *will* in the long run agree on, and the thesis that the truth is what the Scientific Community *would* in the long run agree upon, if it *did* agree. These shifts will be examined in more detail in the next section. James, interestingly enough, reacts to this tension in a different way: he shuns the appeal to an independent but inaccessible reality, but then finds himself in a state of chronic embarrassment about those truths, which he cannot quite bring himself to deny to be truths, which, given the fallibility of our means of acquiring knowledge, may never be verified or falsified.

(f) *Truth as the end of Inquiry*

The thesis that the true is the satisfactory to believe has borne the brunt of criticism from opponents of pragmatism. The first thesis—truth as the end of inquiry—has received relatively less attention. In an article devoted to Dewey's views, however, Russell offers some counter-arguments. Russell points out that, on one interpretation, the thesis apparently entails that whatever beliefs are held by the last man on earth, are true. He comments, rather acidly:

As [the last man on earth] will presumably be entirely occupied in keeping warm and getting nourishment, it is doubtful whether his opinions will be any wiser than ours.

('Dewey's New Logic', [1939], p. 145)

But the thesis may be more charitably interpreted, if it is understood to say that the truth is that opinion to which scientific inquiry tends as a limit, then the fact that science might come to an end before this terminal consensus is reached, is irrelevant.

This interpretation, however, is not without difficulties of its own. For it could still be questioned whether science manifests, as the thesis now seems to require, a tendency towards consensus. Peirce, it seems from at least some passages, *does* believe in such a tendency:

There is a general *drift* in the history of human thought which will lead to one general agreement, one catholic consent.

([1931–58], IX, § 12)

Russell takes him severely to task for this faith:

Is this an empirical generalisation from the history of research? Or is it an optimistic belief in the perfectibility of man? Does it contain any element of prophecy, or is it a merely hypothetical statement of what would happen if men

of science grew continually cleverer? Whatever interpretation we adopt, we seem committed to some very rash assertion.

(‘Dewey’s New Logic’, [1939], p. 146)

So it looks as if the thesis that the Truth is that consensus which use of the Scientific Method would if it continued sufficiently long, reach, may fail for want of an argument that there *is* any such end.

But this objection misses something. It has so far been left vague what, exactly, one is to understand by the ‘Scientific Method’. The kind of objection just outlined takes for granted a rough-and-ready understanding in terms, presumably, of those methods which those we call ‘scientists’ use. Peirce, however, has a theory about Scientific Method, a theory which perhaps offers some explanation of his—as Russell supposed, quite unwarranted—optimism.

According to Peirce, the Scientific Method includes three types of argument: deductive, inductive and abductive. (Abduction Peirce defines as ‘studying facts and devising a theory to explain them’.) As so often, Peirce anticipates more recent philosophers of science, for his theory of scientific method strongly resembles the hypothetico-deductive.

What is important for present purposes is, specifically, Peirce’s view of induction. Peirce thinks of inductive arguments as, roughly, those which extrapolate probabilities from given data. His view of probability is frequentist; the probability of *B* given *A* is given in terms of the proportion of *A*’s which are *B*’s, and, when the *A* series is infinite, the probability is the limiting frequency, if any. Peirce offers a justification depending upon the fact that induction, as he defines it, is a self-correcting process. Once again, the argument anticipates a better known later version, Reichenbach’s ‘pragmatic justification’ of the straight rule of induction.

Peirce’s optimism about the eventual success of the Scientific Method is now more explicable. An essential element in Scientific Method is induction, and induction, Peirce thinks, is such as to yield the true probability, if there is one, eventually. This is not, of course, to say that Peirce’s optimism is warranted; to show *that* one would have to devote considerably more detailed attention to his theory of induction than I have time to do. I claim only to have made his optimism explicable.

This suggestion leaves a question open: the question, whether Peirce’s theory of scientific method is intended descriptively or prescriptively—as a description of the methods scientists do use, or as a prescription of the methods they should use. My impression is that Peirce is not wholly clear on this point. When he sounds confident that science progresses, it is perhaps because he is taking it to be the case that scientists do, in fact, use what he regards as the Scientific Method; when he seems less sure, it is

perhaps because he is thinking of the theory of scientific method as prescriptive only. And sometimes he does sound much less confident than in the last passage quoted. For instance, in a letter of 1908 to Lady Welby he comments:

I do not say that it is infallibly true that there is any belief to which a person would come if he were to carry his inquiries far enough. I only say that that alone is what I call Truth. I cannot infallibly know that there *is* any truth.
(p. 398)

Peirce's ambiguity on this point disguises a difficulty: if his theory of Scientific Method is intended prescriptively, he is not entitled to appeal to the alleged success of practising scientists in achieving consensus, as he does in his third argument for reality; if, on the other hand, the theory is intended descriptively, he is after all committed to some rather strong thesis about the progress of science, and so is vulnerable to some of Russell's criticisms.

Quine puts an objection which somewhat resembles Russell's. In *Word and Object* ([1960]) he objects to the proposed identification of the Truth with 'the ideal result of applying scientific method outright to the whole future totality of surface irritations', that there is no reason to suppose that there is any such unique result. Quine's objection is based, however, on his own theory of scientific method, which stresses that alternative theories, incompatible with each other, may be compatible with the totality of possible evidence. It is not certain that Peirce's theory of scientific method allows this possibility; and if not Quine's objection is not directly relevant to Peirce's position. James, on the other hand, does seem to envisage such a possibility; but, taking seriously the principle that there can *be* no difference that *makes* no difference, he concludes that two such 'alternative' theories would not *really*, but, presumably, only *verbally* differ from each other. So his view too would avoid Quine's objection.

Both Russell's objection and Quine's objection bear on the supposed uniqueness of the end of inquiry. Even if Peirce's optimism that the Scientific Method will or would eventually yield a consensus can be justified by appeal to his theory of induction, however, there would remain another difficulty, which, curiously, Russell and Quine ignore. If truth is the end of inquiry, then, not only must all beliefs warranted, in the long run, by the Scientific Method, be true, but also, all truths must be, in the long run, warranted by the Scientific Method. But what reason is there to think that the Scientific Method would eventually yield all truths? Is it not likely, on the contrary, that some true propositions will never even be entertained? (On this point *cf.* Ayer [1968]). This difficulty relates to another feature of the pragmatists' views. The subject of 'true' in their

writings is, usually, beliefs; and since they stress the importance of community, they clearly intend that different persons should be able to share the same belief. What is not clear, however, is whether 'belief' could be extended to cover propositions which have never been entertained, or whether, if it could not, the pragmatists would be willing to accept the consequence, that only propositions at some time entertained could be true or false. James, whom one might have expected to have been the most willing to admit this, in fact denies it:

countless opinions 'fit' realities, and countless truths are valid, though no thinker ever thinks them.

But he finds such 'truths' of no consequence:

... all discarnate truth is static, impotent and relatively spectral, full truth being the truth that energises and does battle.

('The Pragmatist Account of Truth and its Misunderstanders' in [1909], p. 204)

... the truth with no-one thinking it, is like the coat that fits tho no one has ever tried it on ...

(p. 205)

This ambivalent attitude exactly parallels, of course, his attitude to 'truths' as yet unverified.

4 SOME CONCLUDING REMARKS

I shall end with some brief, but, I fear, rather vague, comments about what seem to me to be major strengths, and the major weaknesses, of the theory.

The theory is a cosmopolitan one, in that it includes substantial coherence and correspondence elements; and it thereby acquires some of the strengths of the coherence and correspondence theories while avoiding some of the weaknesses. Ironically, in view of the fact that the pragmatist theory has been available for a long time but has never enjoyed much popularity, Quinton commented as recently as 1966 that the direction from which progress in the theory of truth is to be expected is in 'the close interweaving of the coherence and correspondence theories' ('The Foundations of Knowledge', [1966], p. 86). Furthermore, the pragmatist theory avoids that divorce of the theory of truth from epistemology which is apt to make classical correspondence theories unsatisfying. By insisting that one ask what difference the truth or falsity of a belief would make, the pragmatists ensure that their theory of truth connects closely with their theory of knowledge. Russell, to be sure, found their stress on the experiential cash-value of true beliefs distasteful; he was apt to say that Pragmatism was an 'engineers' philosophy', bound to lead to cosmic impiety, or at any rate to fascism. But this stress on the experiential cash-value of true

beliefs can do us the important service of raising the neglected question, what, exactly, one should expect of a theory of truth.

Of course, the close connections between the pragmatist theory of truth and their theory of knowledge and theory of meaning mean that the former theory is vulnerable to criticisms directed, in the first instance, at the latter. The acceptability of the thesis that truth is the end of inquiry depends, for instance, on the thesis that the scientific method leads to consensus, and that in turn on a theory of induction, which may involve difficulties which would threaten the whole superstructure. Or again, objections to the pragmatist theory of meaning would be bound to involve consequent difficulties for the theory of truth. And, as I have suggested above, there are indeed tensions between Peirce's pragmatist theory of truth and his fallibilist epistemology. But it is to be hoped that recognition of such tensions may be useful in illuminating some real and important problems which a dogmatic separation of theory of truth and theory of knowledge is apt to disguise.

James once commented that theories generally run through three stages: first, the new theory is attacked as absurd; then it is admitted to be true, but obvious and insignificant; until finally it is seen to be so important that its former opponents claim that they discovered it. He hoped that *The Meaning of Truth*, published in 1909, would at least help the pragmatist theory of truth from the first into the second stage. Clearly, it did not. My object has been rather different: to ensure that if we reject the theory, we do so for the right reasons; and that, if there is anything of importance to be learned from it, we do not ignore the lesson.*

University of Warwick

REFERENCES

- AYER, A. J. [1968]: *The Origins of Pragmatism*, Macmillan.
 DEWEY, J. [1901]: 'A Short Catechism Concerning Truth', in *The Influence of Darwin on Philosophy*, Henry Holt.
 DEWEY, J. [1929]: *Quest for Certainty*. Capricorn Books, 1960.
 DEWEY, J. [1938]: *Logic, The Theory of Inquiry*, Henry Holt.
 DUMMETT, M. A. E. [1959]: 'Truth', *Proceedings of the Aristotelian Society* 1958–9, and in G. Pitcher (ed.) *Truth*. Prentice-Hall, 1964.
 HAACK, S. [1975]: 'Pragmatism and Ontology: Peirce and James', forthcoming in *Revue Internationale de Philosophie*.
 HAMLYN, D. [1970]: *Theory of Knowledge*, Macmillan.
 HERTZ, R. A. [1971]: 'James and Moore: Two Perspectives on Truth', *Journal of the History of Philosophy*, 9.
 HOWARD, V. [1975]: 'The Pragmatic Maximum' *British Journal for the Philosophy of Science*, 26, pp. 343–51.

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- JAMES, W. [1907]: *Pragmatism*, Longman's Green. Page references to Meridian edition, 1955.
- JAMES, W. [1909]: *The Meaning of Truth*, Longman's Green. Page references to University of Michigan edition, 1970.
- MOORE, G. E. [1908]: 'Professor James' "Pragmatism"', *Proceedings of Aristotelian Society*, 8. And in *Philosophical Studies*, Routledge, 1922; page references to 1960 paperback edition of *Philosophical Studies*.
- MURPHY, M. [1961]: *The Development of Peirce's Philosophy*, Harvard University Press.
- O'CONNOR, D. D. [1964]: 'Peirce's debt to F. E. Abbot', *Journal of the History of Ideas*, 25.
- PEIRCE, C. S. [1877]: 'The Fixation of Belief', *Popular Science Monthly*, 12.
- PEIRCE, C. S. [1878]: 'How to Make Our Ideas Clear', *Popular Science Monthly*, 12.
- PEIRCE, C. S. [1908]: Letter to Lady Welby, 1908. All in P. P. Wiener (ed.): *Selected Writings*. Dover 1958; page references to Dover edition.
- PEIRCE, C. S. [1931-58]: *The Collected Papers of Charles Saunders Peirce*. Harvard University Press.
- PERKINS, M. [1952]: 'Notes on the Pragmatic Theory of Truth', *Journal of Philosophy*, 49.
- POPPER, K. R. [1960]: 'Truth, Rationality and the Growth of Scientific Knowledge', in *Conjectures and Refutations*, Routledge & Kegan Paul, 1963.
- PRATT, J. B. [1909]: *What is Pragmatism?* Macmillan, 1909.
- QUINE, W. V. O. [1951]: 'Two Dogmas of Empiricism', *Philosophical Review*, 60 and in *From a Logical Point of View*, Harper Torchbooks, 1953.
- QUINE, W. V. O. [1960]: *Word and Object*, Wiley, 1960.
- QUINTON, A. [1966]: 'The Foundations of Knowledge' in B. A. O. Williams and A. Montifiore (eds.): *British Analytical Philosophy*. Routledge and Kegan Paul, 1966.
- RESCHER, N. [1973]: *The Coherence Theory of Truth*. Oxford University Press.
- RUSSELL, B. [1908]: 'James's Conception of Truth', *Albany Review*, 3, and in *Philosophical Essays*, Allen and Unwin, 1910; references to 1966 revised edition of *Philosophical Essays*.
- RUSSELL, B. [1939]: 'Dewey's New Logic', in P. A. Schillp (ed.): *The Philosophy of John Dewey*. Tudor, 1939.
- SCHEFFLER, I. [1974]: *Four Pragmatists*, Routledge and Kegan Paul.
- TARSKI, A. [1931]: 'The Concept of Truth in Formalised Language' in J. Woodger (ed.): *Logic, Semantics and Metamathematics*, Oxford University Press, 1956.