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TRUTH AND OTHER ENIGMAS

21. *The Reality of the Past* (1969)

IN A VARIETY of different areas there arises a philosophical dispute of the same general character: the dispute for or against realism concerning statements about a certain type of subject-matter, or, better, statements of a certain general type. Such a dispute consists in an opposition between two points of view concerning the kind of meaning possessed by statements of the kind in question, and hence about the application to them of the notions of truth and falsity. For the realist, we have assigned a meaning to these statements in such a way that we know, for each such statement, what has to be the case for it to be true: indeed, our understanding of the statement (and therefore its possession of a meaning) just consists in our knowing what has to be the case for it to be true. The condition for the truth of a statement is not, in general, a condition which we are capable of recognising as obtaining whenever it obtains, or even one for which we have an effective procedure for determining whether it obtains or not. We have therefore succeeded in ascribing to our statements a meaning of such a kind that their truth or falsity is, in general, independent of whether we know, or have any means of knowing, what truth-value they have. Since, in understanding a statement, we know what it is for the statement to be true, we thereby also know what it is for it to be false, i.e., it is false precisely in all cases in which the condition for its truth does not obtain: since this condition is taken to be one which either does or does not obtain independently of our knowledge, it follows that every statement is either true or false, likewise independently of our knowledge.

Opposed to this realist account of statements in some given class is the anti-realist interpretation. According to this, the meanings of statements of the class in question are given to us, not in terms of the conditions under which these statements are true or false, conceived of as conditions which obtain or do not obtain independently of our knowledge or capacity for

The thesis (p. 374): anti-realism about the past can't be dismissed out of hand. First what a dispute over realism is (to p. 362), then the past and the truth-value link.

and hence: *the order matters. The dispute is first about what it is to understand these statements, and only through that about truth. So the argument on p. 362 is about how they're learned, not what exists.*

an effective procedure: *a method sure to settle the question in finitely many steps, as long division settles whether 7 divides 91. The realist's truth conditions may outrun both recognition and any such method.*

for it to be false: *how the realist gets bivalence. 'False' just means that the truth condition doesn't obtain, and it obtains or not whatever we know. So every statement is true or false: the test of realism on p. 359.*

anti-realist interpretation: *he keeps 'true' and 'false' but ties them to what we can recognise as establishing a statement. Where nothing would establish it either way, he won't say that it's one or the other.*

knowledge, but in terms of the conditions which we recognise as establishing the truth or falsity of statements of that class. This conception may be presented in either of two different ways. The conditions in question (those which we recognise as establishing the truth or falsity of statements in the class with which we are concerned) may be taken either as expressible by means of statements of some other class, or simply as ones which we are capable of recognising whenever they obtain. In the former case, we are presented with a species of reductionism: the truth or falsity of a statement of the disputed class will always depend upon the truth of some statement belonging to this second class of statements, to which the reduction is being made. For instance, to use an example I have often used before, it might be said that a statement about a person's character is always in this way dependent for its truth upon some statement about his behaviour (perhaps a very complicated statement). 'Dependent' here does not mean merely that the usual—or even the only—way we have of determining the truth of a statement of the disputed class is by deriving it from the truth of some statement of the reductive class: it means that the truth of a statement of the disputed class *can only consist* in the truth of some statement of the reductive class.

Anti-realism with a reductive class and without. The stage delivers two things: the test is bivalence, not reduction (p. 361), and the past gets the second form (p. 363).

an example I have often used: *in 'Truth' (1959) it was 'Jones was brave', said of a man now dead who never met danger. If nothing he did settles it, is it true or false all the same?*

can only consist in: *more than evidence. Behaviour isn't just how we find out that he is generous, it's all there is to his being so. So where the behaviour is missing, nothing makes the statement true.*

Why call reductionism 'anti-realism'? Well, there is a well-known philosophical tendency to equate the two: to say that a philosopher, by showing that statements about character can be reduced to statements about behaviour, has shown that there aren't really such entities as character-traits, or at least that such entities are not part of the ultimate furniture of the universe. But I do not wish to adopt this point of view, to which, indeed, I am somewhat opposed. Rather, we have to distinguish two cases, according to the effect which the proposed reduction has upon the laws of excluded middle and of bivalence for statements of the disputed class. Let us assume that the reductionist accepts a realist account of statements of the reductive class (if he does not, the question is simply driven back further). We can then raise the question whether, given this assumption, the reduction preserves the law of bivalence for statements of the disputed class or not. If it does, then I should not recognise the reductionist thesis as a species of anti-realism. For instance, if we change the example so that a reduction is proposed of statements about character to statements about physiological constitution, and this is thought of in such a way that to each character-trait corresponds a determinate physiological condition, which is either present in or absent from each individual at any given time, then it will still be correct to say that a statement such as 'He is generous', made about a determinate individual at a determinate time, will always be either true or false (indepen-

and of bivalence: *two laws, kept apart from here on. Bivalence: every statement is true or false. Excluded middle: every 'A or not A' holds. T on p. 367 keeps the second and drops the first.*

dently of whether we can recognise it as such or not). This I should therefore regard as a realist type of reduction. But, if we revert to our previous example, where statements about character were reduced to statements about behaviour, the reduction may well take a form such that a situation can arise in which there is no true statement about a man's behaviour which would render true the statement that he was, at a particular time, generous, nor any true statement about his behaviour which would render true the statement that he was not, at that time, generous. In such a case, the reductionist would reject the realist's insistence that a statement such as 'He is generous' must be either true or false, that a man must, at a given time, either possess or lack the character-trait of generosity. Of course, it remains open to someone who accepts the reductionist's account of the truth-conditions of 'He is generous' to maintain that, whenever the statement is not true, it is false, and that therefore, since he also accepts the reductionist's account of the truth-conditions of 'He is not generous', the latter statement is not after all the negation of the former. But this would be a merely formalistic preservation of the law of excluded middle for statements about character: it would leave unaffected the reductionist's rejection of a realist conception of the meaning of these statements, the conception namely under which an individual, at any given time, either possesses or lacks a given quality, the possession of which will give rise in appropriate circumstances to acts which will not be forthcoming in its absence.

there is no true statement: *the case that matters: a man who never had the chance to give or to refuse. Nothing he did makes 'He is generous' true, and nothing makes 'He is not generous' true. On this reduction neither is true.*

When opposition to realism concerning a certain class of statements takes the form of a thesis whereby the truth of statements of this class is reduced to the truth of statements of some other class, it is not necessary that the reductionism be full-blooded in the sense that it involves a thesis of the translatability of statements of the disputed class into statements of the reductive class. For a given statement A of the disputed class it may, for example, be allowed that there is an infinite set M of statements of the reductive class, such that the truth of any statement in M would entail the truth of A, and such that we do not have in our language any statement of the reductive class equivalent to the disjunction of all the statements in M. In such a case the replacement of statements of the disputed class by statements of the reductive class would not be, without modification of our language, even in principle feasible. All that needs to be maintained by a reductionist is that, whenever any statement of the disputed class is true, it is true in virtue of the truth of some statement of the reductive class, that the notion of truth as applied to statements of the disputed class is simply given by means of this connection with the reductive class, so that it makes no sense to suppose a statement A of the disputed class true without there

an infinite set M: *let A be 'He is generous' and M the endless ways of behaving, each enough for A. No sentence about behaviour says 'one of these'. So A can't be translated, yet it's true only through a member of M.*

true in virtue of: *what a statement is true in virtue of is what makes it true. The last reply of the paper, on p. 373, turns on this phrase.*

being a corresponding true statement of the reductive class, in the truth of which the truth of *A*, in the particular case, consists.

This, then, is one form which opposition to a realist account of the meaning of statements of some particular class may assume. Anti-realism does not, however, need to take on a reductionist form. It may, instead, take the form of holding that the conditions which establish the truth or falsity of any statement of the disputed class are ones which we are simply capable of recognising as obtaining, when they obtain, without our having any means of expressing the fact that they obtain otherwise than by the use of statements of the disputed class. For instance, the dispute in the philosophy of mathematics between platonists and constructivists is precisely a dispute of the kind the general nature of which I have been seeking to describe. According to the platonist, in understanding a mathematical statement, we grasp what has to be the case for it to be true: and the condition for its truth is one which either obtains or does not obtain independently of whether we have, or are even capable of obtaining, any proof of the fact. For the constructivist, by contrast, there is nothing for the truth of a mathematical statement to consist in save our possession of a proof of it: our understanding of a mathematical statement does not reside in our grasp of what it is for the statement to be true, independently of any proof of it, but rather in our capacity to recognise a proof or a disproof of the statement when we see one. The constructivist is here, of course, rejecting the realist conception of mathematical statements which the platonist presents: and whereas, if the platonist is asked what sort of thing, in general, a true mathematical statement is true in virtue of, he can only answer, 'A mathematical fact', the constructivist's answer is, 'Our possession of a mathematical proof'. Yet the constructivist is not, or at least does not have to be, proposing any reduction of mathematical statements to statements about mathematical proofs. He may perfectly well take the position that we have no general way of characterising a proof of a given mathematical proposition independently of a language in which that proposition can be expressed: so there is here no reductive class of statements, intelligible independently of the disputed class. True, indeed, Lagrange's theorem is true only in virtue of the fact that we possess a proof of Lagrange's theorem: but we have no means of expressing this latter fact without the use of a language in which Lagrange's theorem itself can be expressed.

Reductionism, then, although it frequently plays a prominent part in anti-realist philosophies (for example, phenomenalism), is neither sufficient for anti-realism nor necessary to it. It is not sufficient because, when the reduction is such as to leave intact the laws of bivalence and of excluded middle for statements of the disputed class, the reduction does not undermine,

a reductionist form: *the second form is the one the paper needs. There's no other vocabulary for what establishes a statement, we just recognise it. The anti-realist about the past is of this kind (p. 363).*

platonists and constructivists: *platonists hold that a mathematical reality settles every statement of mathematics, provable or not. Constructivists, chiefly the intuitionists Brouwer and Heyting, allow truth only given a proof.*

our possession of a proof: *so of a statement neither proved nor refuted, Goldbach's conjecture say, the constructivist won't assert that it is true or false. Bivalence goes, and classical logic with it. G follows on p. 367.*

Lagrange's theorem: *for instance, that every whole number is a sum of four squares. To say what the proof proves, you need the theorem's own words. So nothing is reduced, as with memory on p. 363.*

phenomenalism: *the view that statements about physical objects are true only in virtue of statements about actual and possible sense experiences.*

but rather justifies, the realist conception; and it is not necessary because, so long as the anti-realist can assume that we are capable of recognising, whenever they occur, the conditions which establish the truth or the falsity of statements of the disputed class, he has no need of the further contention that we have some means of expressing the occurrence of those conditions independently of the use of statements of the disputed class.

The engine of the paper: from the way statements are learned to the conclusion that the realist's notion of truth can't be had. It is applied to the past on p. 363.

The general form of the argument employed by the anti-realist is a very strong one. He maintains that the process by which we came to grasp the sense of statements of the disputed class, and the use which is subsequently made of these statements, are such that we could not derive from it any notion of what it would be for such a statement to be true independently of the sort of thing we have learned to recognise as establishing the truth of such statements. What we learn to do is to accept the truth of certain statements of the reductive class, or, in the case that there is no reductive class, the occurrence of certain conditions which we have been trained to recognise, as conclusively justifying the assertion of a given statement of the disputed class, and the truth of certain other statements, or the occurrence of certain other conditions, as conclusively justifying its denial. In the very nature of the case, we could not possibly have come to understand what it would be for the statement to be true independently of that which we have learned to treat as establishing its truth: there simply was no means by which we could be shown this. It is true, indeed, that we tend to treat statements of the disputed class as if they must be either true or false independently of anything by which they could be known to be true, and therefore of anything in which their truth could consist. This leads us to use these statements in a recognisably different way from that in which we should use them if we had a clear grasp of the kind of meaning which we ourselves have conferred on them, namely by accepting as valid inferences which are in fact unjustifiable. But, in this respect at least, the use which is made in practice of the sentences of our language is not unassailable: we accept invalid inferences because we are dominated by an incorrect picture of the meanings of our own statements. (The most vivid example of the kind of error here being ascribed to the realist is the notion of the *scientia media*, which arises from adopting a realist interpretation of counterfactual conditionals. Theologians who held a strong libertarian position about human action nevertheless held that God is guided, in choosing which individuals to create, by his knowledge of how each individual that he has not created would have acted had he created him.)

What we learn to do: *the working premise. Meaning comes from training, and training can only show us what counts as establishing or refuting a statement. A truth condition beyond that was never there to be shown.*

An objection met before it is raised: don't we reason as if these statements were true or false whatever we know? We do, and the reply is that our practice can be wrong.

accepting as valid inferences: *those that lean on 'A or not A' where nothing settles which: C follows from A and from not-A, so C. The anti-realist is ready to revise logic.*

scientia media: *Latin, middle knowledge (Molina, 1588). A libertarian holds that free acts aren't determined, so nothing fixes what an uncreated man would have done. Yet God is to know it: a truth nothing makes true.*

Statements about the past form a class the application to which of an argument of the anti-realist type seems to be called for. That it has not often

Now the past: the truth-value link against truth as justifiability.

been so applied is doubtless due to certain obvious difficulties arising from applying it: namely, that an anti-realist interpretation of past-tense statements appears incompatible with acknowledging the existence of a systematic link between the truth-values of differently tensed statements uttered at different times. This difficulty is central to the whole issue. The realist has, after all, to meet the anti-realist's challenge to explain how we come by a notion of truth, as applied to statements about the past, considered as applying to such statements independently of our means of recognising these statements as true. His answer is that this conception is attained precisely via our coming to grasp the existence of the truth-value link. If I now (2.45 p.m. 12 February 1969) say, 'I am in my College room', I make a present-tense statement which is, as I say it, true: let us call this statement *A*. Suppose now that exactly one year later someone makes the statement (call it *B*) 'A year ago Dummett was in his College room'. Then it is a consequence of the truth-value link that, since the statement *A* is now true, the statement *B*, made in one year's time, is likewise true. Now, the realist claims, it is from an understanding of the truth-value link, as exemplified in such a case, that we derive a grasp of what it is for a statement in the past tense, whenever made, for example one made now, to be true.

central to the whole issue: *the link serves the realist twice. It looks like a refutation of anti-realism (pp. 368, 372). And, in the next sentences, it is offered as the place where his notion of truth is learned (p. 370).*

call it B: *what the link takes us from and to: a present-tense truth now, a past-tense truth later, whatever is then remembered. The realist's next step, to past-tense statements made now, is tested on p. 370.*

The anti-realist's case consisted of an application to statements about the past of the general form of anti-realist argument. We learn the use of the past tense by learning to recognise certain situations as justifying the assertion of certain statements expressed by means of that tense. These situations of course include those in which we remember the occurrence of some event which we witnessed, and our initial training in the use of the past tense consists in learning to use past-tense statements as the expression of such memories. It seems improbable that there is any general characterisation of the kind of situation in which I remember, as having been a witness of it, that some event took place, otherwise than by using, or referring to my disposition to utter, a sentence expressing that that event occurred: so we have not here any reductionist claim. However, on this anti-realist account, there is no way by which we could be thought to have passed from a grasp of the kind of situation which justifies the assertion of a statement about the past to a conception of what it would be for such a statement to be true independently of any such situation which would justify its being now, or subsequently, asserted. The only notion of truth for past-tense statements which we could have acquired from our training in their use is that which coincides with the justifiability of assertions of such statements, i.e., with the existence of situations which we are capable of recognising as obtaining and which justify such assertions.

The case the realist has just answered is set out only now: p. 362 applied to the past. It yields truth as justifiability and the refusal of bivalence (p. 364).

otherwise than by using: *as with Lagrange's theorem on p. 361. You can't say what I remember without the past-tense sentence itself: 'I remember that it rained'. So there are no memory statements to reduce the past to.*

The only notion of truth: *the thesis in a line. Not that such statements are about present evidence, but that their only truth is our being able to justify them.*

We are not therefore entitled to say, of any arbitrary statement about the past, that it must be either true or false independently of our present or future knowledge, or capacity for knowledge, of its truth-value. Of any statement about the past, we can never rule it out that we might subsequently come upon something which justified asserting or denying it, and therefore we are not entitled to say of any specific such statement that it is neither true nor false: but we are not entitled either to say in advance that it has to be either one or the other, since this would be to invoke notions of truth and falsity independent of our recognition of truth or falsity, and hence incapable of having been derived from the training we received in the use of these statements.

we can never rule it out: *so he won't say that any statement about the past lacks a truth value: evidence may still turn up. He only refuses to say in advance that each has one, as the intuitionist does of unproved statements.*

This challenge of the anti-realist the realist has attempted to meet by claiming that it is from our grasp of the truth-value link that we derive that notion of truth and falsity as applied to past-tense statements which the realist wishes to employ and which the anti-realist is calling in question. It is not now open to the anti-realist simply to reject the truth-value link. This is not merely because, in rejecting it, he would be rejecting a fundamental feature of our understanding of tensed statements, one which plays a predominant rôle in our training in the use of these statements. The anti-realist might, indeed, legitimately attack the conception of the truth-value link if he were able to show that it was internally incoherent (not merely incompatible with the anti-realist's own preferred notion of truth for past-tense statements). He would then be alleging an incoherence at the very heart of our use of tensed statements—one which we may suspect as improbable, but cannot rule out as impossible. Short of this, however, the anti-realist is now faced with a challenge which he in turn must meet. His thesis is not merely that his understanding of tensed statemetns represents a kind of meaning that we could intelligibly assign to them if we wished—this the realist might be prepared to admit: it is, rather, that no possible training in the use of such statements could provide us with that understanding of them which the realist thinks he possesses. The realist has now offered an attempted answer to this negative contention, by claiming that, by stipulating the validity of the truth-value link, we thereby provide that from which a realist conception of truth and falsity for these statements can be derived. Unless, indeed, the anti-realist is prepared to claim that there is some inconsistency in that stipulation itself, he must be prepared to argue that, even when that stipulation has been accepted, we are no nearer a possession of the realist's conception of truth and falsity than we were before. He has therefore to show that he can without inconsistency accept the existence of the truth-value link and still maintain his own conception of truth and falsity as applied to statements about the past.

The terms of the contest. Unable to reject the link, the anti-realist owes two things: he can accept it consistently (pp. 368, 373), and it yields no realism (p. 370).

no possible training: *why the burden shifts. The anti-realist asserted an impossibility, so a single possible route to the realist's notion of truth refutes him. The realist says that stipulating the link is such a route.*

The realist at his strongest. He grants the anti-realist's story of how we learn and moves the dispute to compound sentences, which is where T and G part on p. 371.

The realist's position will be the stronger if he makes certain concessions to the anti-realist. He rejects the identification, which the anti-realist wishes to make, of truth with correct assertibility: but he can readily agree that, so long as we concentrate on the conditions under which we may make a correct assertion by the utterance of a sentence in the past tense—or of any other form of sentence whatever—we shall be unable to distinguish the conditions under which there is evidence for the truth of the statement so made, and those under which it is true. He might agree that, if all we wanted to do with a sentence was to use it on its own to make an assertion, then we might need no distinction between the concept of truth and that of correct assertibility: but we do in fact want to do other things with senteuces—in particular, to link them in truth-functional combinations with other sentences; and it is here that the distinction between the two concepts needs to be grasped, at least implicitly. He may, further, grant that a misleading impression is sometimes given by those who share his general viewpoint of the order in which we acquire the two concepts: namely, philosophers who take grasping the meaning of a statement to consist in knowing the condition for it to be true tend to suggest that our primitive understanding of the statement embodies a knowledge of its truth-conditions, and that we *derive* from this the capacity to recognise what is to count as evidence for its truth; whereas perhaps the true order is the reverse. That is, what we originally learn is, just as the anti-realist says, to recognise when we are entitled to assert a given statement; but, when we come to learn to incorporate that statement into complex ones, we take the further step of learning in what its truth is to be taken to consist; and there will often be a certain latitude of choice within which this new convention can be imposed—i.e., given already what is to count as evidence for the truth of P, it need not thereby be uniquely determined what it is for P to be true. For instance, we could not distinguish between that use of the future tense (the 'genuine future tense') which expresses what is in fact subsequently to take place, and that which merely expresses present tendencies for the future, by reference to the conditions under which we have been trained to assert statements employing the future tense in these two uses, for the conditions in question are exactly the same. The difference comes out only in more complex contexts, e.g., when a future-tense statement stands as the antecedent of a conditional, or when multiple tenses ('was goiug to . . .', etc.) are used.

unable to distinguish: *whenever I assert 'It rained' correctly, I have evidence that it rained. So the practice of asserting, taken alone, can't separate being true from being correctly assertible, that is, justified.*

truth-functional combinations: *compounds like 'if A, then B', with a truth value fixed by those of the parts. 'If it rained, the match was off' is assertible with no evidence of rain, so 'It rained' brings more than assertibility.*

just as the anti-realist says: *the concession at its fullest. What we first learn is when to assert. Truth is a later convention, and the evidence leaves more than one open. So the realist must say where his comes from: the link.*

'genuine future tense': *'The ship will sail' as prediction, or as a report of present plans. The grounds for asserting are the same. But if the sailing is cancelled, 'It was going to sail' stays true on the second use only.*

Two anti-realists, because the answer to the realist on p. 370 depends on which one gives it. T, first, keeps classical logic. G, on p. 367, gives it up.

At least two versions of anti-realism concerning statements about the past can be distinguished. One version would hang together with a realist attitude to statements about the present.

If someone holds that every statement about the present, independently

of our knowledge or means of knowledge of its truth-value, is either true or false, then an anti-realist position on his part concerning statements about the past will probably not involve a rejection by him of classical two-valued logic as applied to such statements. His position in this regard may be compared to that of one who, without any sympathy for constructivist philosophies of mathematics, nevertheless holds, as a consequence of the Gödel–Cohen results on the consistency and independence of the continuum hypothesis, that this proposition is neither true nor false. One who holds that, despite these results, the continuum hypothesis must be determinately either true or false is in effect taking the view that, when we do set theory, we have in mind some completely determinate mathematical structure: in this structure the continuum hypothesis will either hold or not hold. The fact that we can derive neither it nor its negation from the axioms of set theory as we have so far formulated them simply shows that we have not yet succeeded in framing statements about this structure which we can recognise directly as answering to our intuitive grasp of the structure, and from which we can infer whether or not the continuum hypothesis holds in the structure: it remains an open possibility that we shall later be able to do this. This position is Gödel's own view, and stands in contrast to the view I am considering, according to which we do not have in mind any one definite structure, but only a class of structures sharing certain common features described in our set-theoretical axioms. Since these axioms completely determine the *class* of structures we have in mind, the word 'true' as applied to statements of set theory can be interpreted only as meaning 'true in all such structures' and 'false' as meaning 'false in all of them'. Hence there will be statements, such as the continuum hypothesis, which are not in this sense either true or false. It does not follow, however, that we must reject the law of excluded middle for such statements, and refuse to infer the truth of some statement from the fact that it follows both from the truth and from the falsity of the continuum hypothesis. Proving theorems within set theory is, on this view, exactly like deriving laws for groups from the axioms for a group: we are showing that the given theorem must hold good in every structure which satisfies the axioms. In each particular structure, the continuum hypothesis will be either true or false, and so the statement '*CH* or not *CH*' will be true in every structure; in particular, if the two statements, 'If *CH*, then *A*' and 'If not *CH*, then *A*' hold in every structure, then '*A*' will hold in every structure also.

For the species of anti-realist about the past to whom I was comparing one who takes this view about the continuum hypothesis, only those statements about the past are true whose assertion would be justified in the light

A long comparison from set theory with one point, drawn for the past on p. 367: a statement can be neither true nor false while 'A or not A' still holds.

the continuum hypothesis: *CH: no infinite set is bigger than the set of whole numbers and smaller than that of the real numbers. The usual axioms of set theory can't refute it (Gödel, 1938) and can't prove it (Cohen, 1963).*

Gödel's own view: *the realist of the comparison: one universe of sets, of which CH is true or false though our axioms don't say which. For the rival the axioms fit many structures, as those for a group fit many groups.*

law of excluded middle: *the point. CH holds in some structures and fails in others, so it's neither true nor false. Yet 'CH or not CH' holds in each, so it's true outright, and arguing by cases stays valid: supervaluation.*

no one past history: *T's picture. The present is fixed and many pasts fit it. The possible histories stand where the structures stood on p. 366, and what is now the case where the axioms stood.*

of what is now the case. For him, this means that there is no *one* past history of the world: every possible history compatible with what is now the case stands on an equal footing. Here 'compatible' is to be interpreted in the light of the way we actually do establish the truth or falsity of statements about the past: any past sequence of events would be ruled out as incompatible with what is now the case if it involved, e.g., that most of our present memories of experienced events were wrong, or in some other way destroyed our ordinary concept of what justifies the assertion of or constitutes evidence for the truth of a statement about the past. But, in any one such possible history of the world, any particular statement about the past will be either true or false. Although such a statement, in virtue of being true in some possible histories and false in others, may fail to be either true absolutely or false absolutely, nevertheless the disjunction of it and its negation must be true in every possible history, and hence true absolutely.

true absolutely: *true in every possible history, T's form of the anti-realist's truth. 'It rained or it didn't' is true absolutely even when neither half is. So T keeps classical logic and denies bivalence (p. 372).*

Such a species of anti-realism about the past contrasts with that which would be adopted by someone who was prepared to apply quite generally the kind of argument for anti-realism which I have sketched, in conformity with a general view of the character of the meanings which our sentences possess. Someone who thought in this way would hold that we could not, in any context, gain a notion of truth as attaching to statements independently of our means of recognising them as true. He would therefore not be in a position to concede the general validity of the law of excluded middle for statements about the present, and *a fortiori* not for statements about the past. His type of anti-realism about the past would involve an alteration in the logic we used for such statements comparable to the alteration induced by the intuitionist conception of the meanings of mathematical statements.

a fortiori: *Latin, all the more so. For G all meaning works as the intuitionist says mathematics does: to assert 'A or B' you need grounds for one of them. So 'A or not A' can't be asserted while A is unsettled.*

I shall call an anti-realist of the first of these two varieties an 'anti-realist solely about the past', and designate him by the letter 'T'; the second variety I shall call a 'global anti-realist' and designate him by the letter 'G'. Perhaps the most interesting question about realism is precisely whether global anti-realism is coherent: for, if it is not coherent, then there must at least be some restrictions on the applicability of the anti-realist argument, and, by finding out what these are, we may hope to take a large step towards seeing how to resolve the various particular disputes. There are a number of reasons for doubting whether global anti-realism is coherent, for instance: behaviourism is one species of anti-realism, namely a rejection of realism concerning mental states and processes; phenomenalism is another species, namely the rejection of realism concerning physical objects and processes; it immediately occurs to us to wonder whether it is possible

reasons for doubting: *the one given: behaviourism explains minds by bodily behaviour, phenomenalism explains bodies by experiences, which are mental. Each leans on what the other explains away.*

consistently to maintain an anti-realist position simultaneously in both regards. But I think that without doubt the thorniest problem for one who wishes to transfer something resembling the intuitionist account of the meanings of mathematical statements to the whole of discourse is what account he can give of the meanings of tensed statements.

One reason why philosophers have been so chary of adopting an anti-realist view of statements about the past is precisely that there appears at first sight to be a gross incompatibility between this view and the truth-value link. To revert to our example, if it follows from the truth of the present-tense statement *A* that the past-tense statement *B*, if uttered in a year's time, will then be true, it seems thereby also to follow that the past-tense statement *B* will not then be true just in virtue of something which can then be recognised as justifying the assertion of *B*: indeed, it is entirely conceivable that no one, myself included, might remember where I was at that particular time, and no further evidence, direct or indirect, be available to settle the question, even though we could never be sure that no such evidence would ever turn up.

The difficulty of p. 363 returns as a charge of inconsistency. The anti-realist must restate his thesis so that B comes out true. The realist renews the charge on p. 372.

will not then be true: *the charge. By the link B will be true next year because A is true now. By anti-realism B will be true then only if something then justifies it. If every trace has gone, the two answers differ.*

No matter what manoeuvres he attempts, the anti-realist will be unable to avoid inconsistency in recognising the existence of the truth-value link if he formulates his contention as being that a past-tense statement, made at any given time, is true at that time only if there is at that time a situation justifying the assertion of the statement. Rather, he must state his general thesis by saying that a statement in the past tense is (or was, or will be) true just in case there now is or will subsequently be a situation whose existence we can now acknowledge as justifying the ascription to that statement of the value true. Thus, a statement in the past tense, made a year hence, will be true just in case either there is now a situation which we can recognise as obtaining and which we now regard as justifying the statement that the past-tense statement will be true when uttered a year hence; or else there will be, at some future time, a situation which we can then recognise as obtaining, and whose occurrence at that future time we now regard as entailing the correctness of the statement that the past-tense statement will be true when uttered a year hence. Likewise, a past-tense statement made a year ago was true then just in case there is now a situation which we can now recognise as obtaining and as justifying the assertion that that past-tense statement was, when made, true. The thesis thus relates the truth or falsity of past-tense statements, whenever made, not to the evidence available for them at the time of utterance, but to the evidence that is now, or may later become, available for ascribing to those statements the property of being true when they are uttered.

he must state his general thesis: *the answer. Evidence counts from now, when the thesis is stated, not from when the past-tense statement is made. So B will be true next year because we now have evidence, for A, that it will.*

some future time: *the second clause lets evidence that turns up later count, provided we can say now that it would settle the matter. So the thesis isn't that the past is whatever today's records make it.*

The thesis thus relates: *the thesis in a sentence, and the target of two objections: that it says only what we may now say (p. 369), and that 'now' will be another time next year (p. 372).*

The realist will doubtless find this reformulated anti-realist position even more repugnant than before. He wants to object that no general account has been given of the meaning of the past tense: the anti-realist has explained only how we are *now* to ascribe past, present or future truth or falsity to past-tense statements—or rather, to tensed statements generally—uttered now or in the past or the future: he has not said how we shall ascribe truth-values to those that are subsequently uttered at the time when they are uttered. Of course, the anti-realist will claim that he *has* explained this: he has said under what conditions a past-tense statement uttered a year hence will at that time be true. The realist wants to object, 'But you have only told me when it is right to say *now* of them that they will be true: I want you to say under what conditions it *will* be true to say of one of them, "It is true", at the time when it is uttered.' To this, of course, the anti-realist will reply, 'Why, that is the very same thing, isn't it?'. The realist can only impotently answer, 'What *I* should mean by, "It is right now to say that the statement *B* will be true a year hence", is exactly the same as what I mean by, "The statement *B* will be true a year hence"; but what *you* mean by, "It is right now to say that the statement *B* will be true a year hence", while it may be the same as what *you* mean by, "The statement *B* will be true a year hence", isn't at all what *I* mean by, "The statement *B* will be true a year hence"; and I want you to tell me under what conditions *B* will be true a year hence, in the sense in which *I* understand that expression.' But when the anti-realist asks the realist to explain the sense in which he does mean his question, he can only splutter that he is talking about the truth-value which *B* *will* actually have at that very time, and not the truth-value which we merely now *say* that it will then have; and thus elucidates nothing.

I want you to tell me: *he can't make the request stick. Whatever he says to explain 'the truth value B will actually have', he says now, and the anti-realist takes it his own way. What he wants comes next.*

The exchange stops and a diagnosis takes over: the realist's question needs a standpoint outside time. No new argument, but the last reply (p. 374) rests on this picture.

What the realist would like to do is to stand in thought outside the whole temporal process and describe the world from a point which has no temporal position at all, but surveys all temporal positions in a single glance: from this standpoint—the standpoint of the description which the realist wants to give—the different points of time have a relation of temporal precedence between themselves, but no temporal relation to the standpoint of the description—i.e., they are not being considered as past, as present or as future. The anti-realist takes more seriously the fact that we are immersed in time: being so immersed, we cannot frame any description of the world as it would appear to one who was not in time, but we can only describe it as it is, i.e., as it is now. This latter phrase is, of course, tendentious—it is taken from the hostile account the realist would give of the anti-realist's views: for the anti-realist will say that he can describe how the world will be and how it has been, and to this claim the realist will reply, 'You only

precedence between themselves: *earlier and later, with no 'now': McTaggart's B-series (p. 370), against his A-series of past, present and future. The realist wants truth stated in the first.*

tendentious: *'as it is now' makes him sound as if he denied the past. He doesn't. The realist's reading is 'how we now say it will be or has been' (p. 370).*

mean: how we now say it will be or has been.' It is the anti-realist who takes time seriously, who thinks in the way McTaggart described as believing in the reality of time; it is the realist who takes the view McTaggart was advancing when he proclaimed the unreality of time. There is a strong temptation to try and contrast the two positions by saying that, for the anti-realist, the past exists only in the traces it has left upon the present, whereas for the realist, the past still exists as past, just as it was when it is present: and this is why for him a description of things as they actually are in themselves will treat all moments of time alike and prescind from the particular view of them which an observer who is in time, and views the world from the particular point he is then at, is forced to take. Such a way of drawing the contrast ought to be rejected by both disputants—certainly by the anti-realist: for it describes each opinion in the light of the opposed opinion; but it does succeed in conveying something of the psychological effect of the two opinions.

The realist is unsatisfied with the anti-realist's defence, but before he can press him further, the anti-realist counter-attacks by asking him to spell out in what way he supposes that an instance of the truth-value link, as determining the truth-value of a statement in the past tense to be made in the future, yields an understanding of a realist conception of truth as applied to past-tense statements made now. The realist's answer is: Just as you can grasp that the statement *B*, made in a year's time, will be true in virtue of the evidence that now exists for the truth of the present-tense statement *A*, even though in a year's time all trace of that evidence may have vanished, so you can conceive of the possibility that, a year ago, there was evidence justifying the assertion then of a present-tense statement '*P*', even though there is now no evidence to justify the assertion now of the statement 'It was the case a year ago that *P*'; in forming this conception you have come to grasp precisely the sort of condition under which, on my account, the statement 'It was the case a year ago that *P*' is true, and under which it would not be true on your account.

The response to this argument will differ according as our anti-realist is a global one (G), or an anti-realist solely about the past (T). For G, the whole theory of meaning uses as its fundamental concept that of the evidence which justifies the assertion of a statement. His conception of meaning is thus a generalisation of the intuitionist account of the meaning of mathematical statements: namely, first, to grasp the meaning of a statement consists just in being able to recognise of any situation whether or not it conclusively justifies the assertion of that statement (and, perhaps, also, whether or not it conclusively rules out that assertion); and, secondly, the meaning

McTaggart: *in 'The Unreality of Time' (1908) he argued that past, present and future are contradictory, so time is unreal. The twist: the realist about the past is on his side, for he too leaves 'now' out.*

Such a way: *caricatures, each side as the other sees it. The anti-realist doesn't make the past consist of present traces, which would be a reduction (p. 363). Nor does the realist say that it still exists.*

The task left from p. 364: how could the link teach the realist's notion of truth? His answer is an argument from lost evidence. G and T reply on pp. 371–372.

Just as you can: *an argument by symmetry: we stand to last year as next year's speaker stands to us. Grant that B will be true with its evidence gone, shift it back a year, and you have a truth nothing now justifies.*

there is now no evidence: *one conceivable case is all the realist needs. If the anti-realist can make sense of it, he has the notion of truth he said no training could give (p. 364).*

Two replies. G denies that the realist's case can be supposed at all. T supposes it and grants the conclusion, but only as truth relative to a history (pp. 371–372).

of a complex statement is given in terms of the meanings of its constituents, as thus explained by reference to what verifies them. G cannot therefore attach any sense to the supposition that there was evidence, a year ago, which would then have justified the assertion of the present-tense statement '*P*' other than as the supposition that we now had (or might later acquire) evidence that a year ago there was such evidence. G will, of course, readily concede the obvious fact that we sometimes forget or otherwise lose a particular piece of evidence: but, since something that is now evidence that a year ago there was evidence for the truth of '*P*' is necessarily evidence justifying the assertion now of 'It was the case a year ago that *P*', it is for him a plain contradiction to suppose that there might have been evidence a year ago justifying the assertion of '*P*' then, and that, not only had that particular piece of evidence been lost for ever, but that *all* evidence which would justify the assertion of 'It was the case a year ago that *P*' had likewise been lost for ever.

attach any sense: *for G, to understand a supposition is to know what would justify asserting it. What would justify 'there was evidence a year ago'? Only evidence that we have now or may get later.*

a plain contradiction: *evidence now that there was evidence for 'P' is evidence now that P was the case. So 'evidence then, none ever after' can never be justified, which for G makes it a contradiction, not a supposition.*

The anti-realist T is in a different position. While for G a conditional statement, 'If *A*, then *B*', means in effect, 'If we had evidence that *A*, then we should also have evidence that *B*', T interprets the sentential operators in a truth-functional manner. He denies, of course, that every past-tense statement has either absolute truth or absolute falsity; but each has truth or falsity relative to each possible past history of the universe, and the sentential operators are to be understood by the use of the two-valued truth-tables relative to each such possible past history. Thus, for him, where '*A*' is a statement in the past tense, 'If *A*, then *B*' means 'For every possible past history of the universe, it is not the case that "*A*" is true relative to it and "*B*" false'; here, of course, by a 'possible' past history is meant one compatible with evidence now available or subsequently to become available. Hence T can admit as an intelligible antecedent for a conditional the proposition that a year ago there was evidence for the truth at that time of '*P*', but that no evidence that '*P*' was then true is now, or ever will become, available. He has therefore to face the question whether he should not concede that, if that proposition held good, then the statement 'It was the case a year ago that *P*' would nevertheless be true.

in a truth-functional manner: *the difference from G (see p. 365). In each history 'if A, then B' gets its value by the truth table: false only where A is true and B false. It's true absolutely if that happens in no history.*

an intelligible antecedent: *so T, unlike G, understands the realist's case: evidence for 'P' a year ago, and none now or ever after. It can't be asserted, but it has a truth value in each history, enough to put it after 'if'.*

This is not, however, an embarrassing question for T: he can readily return an affirmative answer. For him, it is indeed correct to say that 'It was the case that *Q*' is true if and only if 'It is the case that *Q*' was true: but this is, however, that sense of 'true' in which it is used relative to a particular possible past history. In this sense, for any statement '*R*', whatever its tense, '*R*' is equivalent to 'It is true that *R*'; and so, for a present-tense statement '*Q*', 'It was the case a year ago that *Q* then', 'It was the case a

an affirmative answer: *T grants the conditional: if there was evidence then, it was the case that P. But that is truth within a history. It doesn't make the statement true absolutely, so the realist's notion isn't reached.*

year ago that it was then true that Q', and 'It is true that it was the case a year ago that Q then' are all equivalent. According to T, this is the sense of 'true' in which it is normally used *within* the language, and, because the law of excluded middle holds good relative to each possible past history, we may rightly say of any statement that it is either true or false, employing this sense of 'true' and the correlative sense of 'false': but it does not necessarily follow that, for any given statement, there is a determinate answer to the question, 'Which is it?'. He will also admit that the notion of absolute truth (truth in all possible past histories) is not one which we normally express within the language by means of the word 'true': rather, we tend to speak in epistemic terms, of a statement as being certain or as being known to be true. Certainty is, indeed, not for T just the same thing as absolute truth: since T is an anti-realist only with respect to the past, he can allow the possibility that a statement may be true even though we do not, and never will, know of any evidence in its favour; for him, a statement is true (absolutely) if there is now, or will be, something of the kind which we recognise as evidence conclusively justifying the assertion of the statement, whether or not we are aware of it. The fact, however, that we do not normally use the word 'true' within the language in the sense of 'true absolutely' does not, in his view, invalidate his claim that it is only in this sense of 'true' that we are entitled to assume that there is a determinate answer, even if known only to God, to the question whether a given statement is or is not true: and in this sense the law of bivalence does not hold—we cannot assert that, for every statement, either it or its negation is (absolutely) true.

normally used within the language: *T has two senses of 'true'. The everyday one works inside each history, so every statement is 'true or false', though nothing need settle which. The strict one, absolute truth, is truth in them all.*

in epistemic terms: *epistemic: to do with knowledge. But T's absolute truth isn't knowledge. It needs conclusive evidence to exist now or later, noticed or not, since T is a realist about the present, where evidence is.*

invalidate his claim: *T's result: only absolute truth comes with a fact of the matter, and there bivalence fails. He grants each step of the argument of p. 370 and doesn't arrive at the realist's truth.*

The two anti-realists have provided an answer to the realist's argument: but the realist now voices his dissatisfaction with the reply which they made to his original argument that they could not consistently acknowledge the existence of the truth-value link, as follows:

The charge of p. 368 in its strongest form. Let a year pass and the evidence for B vanish: he will then say that B isn't true, and be right. The reply is on p. 373.

'You learned the use of the past tense a long time ago. You are surely not maintaining that the use which you then learned can be explained in terms of a connection between the truth-value of a past-tense statement and the evidence in its favour which is available at the *present* time?—I mean the time which I refer to if I now use the expression "the present time" (say, 12 February 1969). Rather, you surely mean that the use you learned can be explained by an account such as you gave of the way in which truth-values are to be assigned to past-tense statements in terms of "the present time" as this phrase is understood at whatever time the account is given, i.e., as referring to that time. For you must surely agree that if, in a year's time, you still maintain the same philosophical views, you will in fact say that, on the supposition we made, namely that all evidence for the truth of the

Rather, you surely mean: *the thesis of p. 368 said 'now'. It must hold whenever it's stated, or it isn't an account of what you learned long ago. Stated next year, its 'now' is next year, and so is the evidence that counts.*

past-tense statement *B* is then lacking, and will always remain so, *B* is *not* true (absolutely). And surely also you must maintain that, in saying that, you will be correct. And this establishes the sense in which you are forced to contradict the truth-value link.'

The last reply: today's statement and next year's are both correct, for 'absolutely true' won't say then what it says now. The ground, below: 'there is' shifts its range.

The anti-realist can hardly pretend that he will not say this, nor can he hope for much respect for his views if he denies that he will be correct in saying it; so, even if he is not convicted of contradicting his earlier contention that the statement *B*, if made in a year's time, will, in virtue of the present truth of *A*, be (absolutely) true, it appears that the realist is justified in maintaining that here at least the anti-realist must diverge from the truth-value link. But the anti-realist replies that he will not in a year's time mean the same by 'absolutely true' as he now means by it: indeed, he cannot by any means at all now express the meaning which he will attach to the phrase in a year's time. The realist objects that there is no more a change of meaning than there is a change of meaning in the word 'now' as it is used at different times. But the anti-realist's position is that a statement is true (absolutely) if there is something in virtue of which it is true. He will agree completely with the realist that the truth-value link requires us to recognise that a past-tense statement, made in the future, may be true in virtue of some fact relating to a time before the making of the statement, e.g., to the present; but he denies that this can legitimately make us conclude that a past-tense statement, made now, can be true in virtue of some past fact, if 'past fact' means something other than that by means of which we can recognise the statement as true. What we learn, when we acquire our language, is what each given form of statement, if true, is true in virtue of. We can thus always say quite generally that a statement is true only if there is something in virtue of which it is true. But to say that we are in time is to say that the world changes; and, as it changes, so the range of even unrestricted quantifiers changes, so that that over which I quantify now when I say, 'There *is* something in virtue of which . . .', is not the same as that over which I shall be quantifying when I use the same expression in a year's time. The anti-realist need not hang on to the claim that the meaning of the expression alters: he may replace it by the explanation that he cannot now *say* what he will in a year's time be saying when he uses it. Even if 'now' *means* the same whenever it is used, I cannot now *say* by means of it what I will later be able to say by means of it: to adapt an example of Prior's, if I am glad that the pain will be over in five minutes, this is not the same thing I shall be glad about in five minutes' time when I say, 'Thank God it's over now!' Of course, we may certainly restrict a quantifier to what will exist in a year's time: but that is not what is here in question—we are not speaking of objects

the word 'now': *the rejoinder. 'Now' has one meaning, a rule picking out the time of speaking, though the times differ. If 'absolutely true' is like that, the two statements judge one B by one standard and clash.*

he denies: *granted: B, made next year, will be true in virtue of a fact about today. Denied: that a statement made now is true in virtue of a past fact beyond all we can recognise. The symmetry of p. 370 again.*

we are in time: *the premise of the reply. An unrestricted quantifier is 'there is' ranging over everything, not over some selection. Even so, what there is to make statements true next year isn't what there is now.*

I cannot now say: *the weaker claim will do: the meaning stays, but what the words will say next year can't be said now. As in Arthur Prior's 'Thank Goodness That's Over' (1959): the later relief had no earlier wording.*

which pass out of existence but can still be referred to; such objects are not of the right category to be things in virtue of which a statement is true. The whole point is that we are using an *unrestricted* quantifier: if we placed any restriction on the range of the quantification (save for the restriction to the right category), we should no longer have any justification for claiming that a statement is true only if there is (within the restricted range) something in virtue of which it is true. And even though it is unrestricted, the range changes; anyone who refuses to recognise this, the anti-realist claims, is trying to think himself outside time.

an unrestricted quantifier: *the principle 'true only if something makes it true' needs 'something' to leave nothing out. Each year's speaker uses it so and is right. One range for all times at once is the view from outside time.*

The dispute, as we have thus far pursued it, has not led to victory for either side. The anti-realist presented an argument to show that we *could* not derive, from our training in the use of the past tense, that conception of truth as applied to statements about the past which the realist professes to understand. The realist appealed to our grasp of the truth-value link as providing the means whereby we acquired that conception of truth. The anti-realist's reply to this showed that the realist's argument need not be taken as compelling: but it did not prove it definitely wrong. The realist then countered by claiming that the anti-realist could not consistently acknowledge the existence of the truth-value link. The anti-realist's reply showed, once more, that his position is not in blatant contradiction with it, and that therefore an anti-realist view of statements about the past is at least not to be dismissed out of hand. To show that has been the principal object of this paper. Of course, like everyone else, I feel a strong undertow towards the realist view: but, then, there are certain errors of thought to which the human mind seems naturally prone.

The score: argument and link (p. 363), G's and T's replies (pp. 371–372), the charge (pp. 368, 372), its answer (pp. 368, 373). A draw, and the thesis claims no more.

taken as compelling: *G and T each accepted the link without the realist's truth, so the link doesn't force realism. That leaves open that the realist's own reading of it, the symmetry of p. 370, is the right one.*

a strong undertow: *undertow: the current beneath a wave that pulls a swimmer out to sea. A dry last word. That realism feels right to everyone is no evidence for it: the feeling may be the wrong picture of p. 362.*