

Analytic–Synthetic

Jonathan Bennett

from *Proceedings of the Aristotelian Society* 59 (1958–9), pp. 163–88.

1. Introductory

The aim of this paper¹ is to attack Quine's views on the analytic–synthetic distinction (ASD), but more than half of it will be devoted to arguing that an attack is still required. This preliminary thesis is based on the claim that what Quine presents as **(1)** an attack on the ASD, followed by **(2)** some remarks about confirmation and disconfirmation, offers a more formidable obstacle to the adherent of the traditional ASD if **(2)** is built into **(1)** as a positive but unwelcome theory of the ASD.

I shall argue that a proponent of this broadly Quinean theory of the ASD has a crucial advantage over most of Quine's critics who have so far published,² namely that if the Quinean theory is correct then it is possible clearly and cogently to explain the ASD to someone who does not yet understand any intensional terminology at all. I shall try to give such an explanation in terms of the Quinean theory, and to show that there are some grounds for pessimism

as to the chances of the rival theory's being able to do as well. Formal definitions of intensional terms always involve other intensional terms, of course, but I shall argue that any of the usual non-Quinean ways of explaining intensional terminology, however informally, essentially involve a prior understanding of other intensional terms.

Grice and Strawson (op. cit., p. 151) offer one such explanation, freely admit that it is not a full explanation of the intensional term concerned, but claim that at least 'it breaks out of the family circle [of intensional terms]'. I shall argue that this is not true. But this leaves open the question whether they would grant that the provision of explanations which break out of the family circle is a necessary condition of the acceptability of intensional terminology as a whole (and the related question, whether they grant that the way in which one breaks out of the circle must determine what theoretical remarks one permits oneself about intensional terminology). An assumption which will underlie the whole

¹ A substantially different draft was the subject of helpful comment by an unusually large number of people. I acknowledge my indebtedness for patient criticism to W. V. Quine, H. P. Grice, R. B. Braithwaite, Margaret Masterman, E. J. Lemmon and H. S. Ewing. It is more than usually necessary to stress that they bear no responsibility for errors or inadequacies that the paper may still contain.

² Of the many articles defending the traditional point of view, I shall be almost exclusively concerned with the most considerable, H. P. Grice and P. F. Strawson's 'In Defence of a Dogma', *Philosophical Review*, 1956. But I hope also to take into account the important parts of a wide range of talk by traditionalists in Oxford and Cambridge.

of this paper is that such explanations are required. One may of course understand a group of words without being capable in practice of explaining their meaning in terms of words outside the group; but if one believes that such explanations are not even in principle available, then I do not see how one can justifiably hold to the claim to understand the words concerned, unless one can indicate how their meaning could be learned non-verbally (presumably through some sort of ostensive procedure), an option which I do not think anyone regards as open in the case of the intensional family circle. Reading between the lines of ‘In Defence of a Dogma’, especially p. 149 thereof, I suspect that Grice and Strawson share this assumption that there would be something radically suspect about a family of intensional words of which no extra-familiar explanation could be given. But I may be wrong about this.

2. A Quinean analysis of the ASD

Any given person at any given time has a corpus of belief which is registered in a class of sentences which he calls or is disposed to call true (or, for brevity, ‘sentences which he accepts’). In the light of experience, he from time to time alters the membership of his class of accepted sentences, because some experiences put him in a position such that if he is to be rational he must deny something he has hitherto accepted (or, for brevity, ‘because some experiences are recalcitrant [relative to his class of accepted sentences]’). In making a linguistic adjustment in face of a recalcitrant experience, any given sentence may be retained in the class of accepted sentences; and any given sentence may be banished from that class in face of some recalcitrant experience.

Three comments:

(1) The notion of recalcitrance may be broken down further into the notions of an ‘observation sentence’, of ‘having to accept an observation sentence in the light of experience’, and of ‘inconsistency between an observation sentence and a totality of other accepted sentences’. This kind of inconsistency can be unproblematical for someone who nevertheless does have a problem about inconsistency between non-observation-sentences or about inconsistency between an observation-sentence and a small class of non-sentences. Of course, anyone who believes himself to possess independent reasons for denying that any sentence can function just to report on a present experience will not accept this elaboration of the notion of recalcitrance: the debate on that issue has only a terminological relevance to the problems here under discussion. The main thing to notice is that if one does believe that there is a class of present-tense sentences which do nothing but report on present experience then one will locate them in the way just indicated: one will say that these sentences are simply forced on us by experience,¹ but that in the reconciling of any accepted sentences of this sort with a hitherto accepted totality of other sentences, any other sentence may be retained and any may be rejected.

(2) The fact that any sentence may be retained becomes obvious upon consideration of the ways in which counter-evidence can be explained away by the acceptance of hitherto rejected sentences (as in ‘The barometer must have been playing up’); and upon consideration of the fact that a sentence can always be retained by changing its meaning suitably. (I’m using intensional terminology, but only to point to an uncontroversial aspect of a familiar phenomenon.)

¹ As it stands, this is not quite true, for sense-datum adjectives are as liable to conceptual revision as any others. Because of this and other difficulties, I shall proceed in terms of recalcitrance, taken whole

(3) Similarly, the fact that experience may lead us to reject any given sentence is just the fact that any synthetic sentence may be falsified by the empirical facts, and that any analytic sentence may become false through a meaning-change which is brought about by the occurrence of recalcitrant experiences. Some people who grant that any sentence could be rendered false by a meaning-change nevertheless claim that with only a small class of sentences is it possible to describe a state of affairs which would invite a meaning-change such as to render the sentence false. I see no reason to believe this, and as an indication of how to look for such a description in a given case, I suggest the following: associated with any analytic sentence there is a range of synthetic sentences stating facts about the world in virtue of which it is convenient that the words in the analytic sentence should have the meanings they do have; suppose a falsification of a judiciously selected sub-set of these synthetic sentences, and you are well on the way to describing a state of affairs which invites the falsification of the analytic sentence.

To return to our description of a range of linguistic facts which could be known and understood by someone who had no understanding of any intensional words: If two different adjustments in the face of a recalcitrant experience are envisaged, one of which produces a totality of accepted sentences which is a very great deal simpler than that resulting from the other adjustment, then the former will be chosen. The notion of simplicity used here cannot be made very precise: sometimes the greater simplicity of one totality will consist in its greater adaptability to mathematical handling; sometimes in its relative economy of basic vocabulary; sometimes in its being able to say in fewer words than the other anything that the other can say.

Other criteria than simplicity also operate in these decisions, but it seems clear that wherever this criterion applies decisively in favour of one totality against another, an acceptance of the latter totality will be condemned as irrational. In some such cases it is said that the former embodies a more satisfactory conceptual scheme than the latter; in others, that certain members of the latter totality are being retained only at the cost of arbitrary and implausible saving devices of various sorts; and sometimes one would not know which of these descriptions to adopt. In the meantime we need only note the plain kind of fact which is pointed to by either description.

There is a further plain fact. If someone is confronted with a recalcitrant experience, the various alternative adjustments which he may make to his hitherto accepted totality may be compared not only in respect of the simplicity of the resultant totality in each case, but also in respect of the extensiveness of the adjustment necessary to reach the resultant totality in each case. Often, if not always, the least extensive adjustment consists in dismissing the recalcitrant experience as illusory; but if this way out is taken often enough the resultant totality will be more complex—because less thoroughly organised—than would have been a totality which was more trouble to arrive at. I take an adjustment to be more extensive than another if it involves the acceptance of more hitherto rejected sentences than the other, or the rejection of more hitherto accepted sentences than the other. The two halves of this criterion do not conflict in the cases with which I am concerned.

Further: A person at a given time can have a certain amount of information about individual members of his set of accepted sentences, information as to the extensiveness of any adjustment of which their rejection formed a part. He will have such information about, say, the sentence S if

he knows that in his currently accepted set there are many sentences his acceptance of which he justifies by arguments in which S occurs and which he cannot justify by arguments using only sentences he now accepts but not using S. For in such a case he will know that any adjustment in which S is rejected will lead to a resultant totality of accepted sentences in which either **(a)** membership is denied to the sentences whose present defence requires S, or **(b)** membership is accorded to new sentences which provide alternative ways of justifying the continued acceptance of the sentences in question.

For example: Accepted sentences of the form **(i)** ‘The temperature of such-and-such a star is such-and-such’ depend, for those who accept them, on sentences of the form **(ii)** ‘Temperature correlates with light-emission in such-and-such ways’, and these depend on sentences of the form **(iii)** ‘Temperature correlates with mercury-column readings in such-and-such ways’, and these in their turn depend on sentences along the lines of **(iv)** ‘Temperature has to do with the obtaining of such-and-such sensations’. Rejection of **(ii)** jeopardises **(i)** and all that depends on it; rejection of **(iii)** jeopardises **(i)** and **(ii)**; rejection of **(iv)** jeopardises all the other three.

This example brings out the fact that the most straightforward cases of commensurability of two or more sentences in respect of how much depends on them are those cases where the sentences have a general term (or an abstract noun) in common and where one sentence is said to have more depending on it than another simply because the second sentence itself depends on the first. The example also helps to bring out the fact that where S_1 and S_2 both involve a general term F, and where S_1 depends on S_2 the situation can be described as one in which S_2 states necessary and/or sufficient conditions for Fness which are

employed in establishing S_1 . In what follows, when I wish to say that one sentence shares a general term with another and has more depending on it than depends on the other, I shall say that it is *less dispensable* than the other.

Now the point of all this is that a candid observer of the linguistic scene, having noted all these facts and having listened to uses of intensional terminology, might very well conclude that to call a sentence ‘analytic’ is to register a conviction that it is highly indispensable—less dispensable than any sentence which shares a general term with it and which is called ‘synthetic’. It might be argued that such a belief about the meaning of ‘analytic’ must be wrong, on the grounds that if that were what people intend by their use of intensional terminology then they would not make the theoretical remarks about intensional terminology which in fact they do make. But if the holder of the belief were led by it to draw the analytic–synthetic line just where everyone else draws it, and if his critics were unable to challenge his account of intensional terminology by producing a countertheory, then most of us would grant that he was entitled to be satisfied with his theory and to remain unconvinced by opponents’ protests that his, story, though extensionally adequate, was wrong in some way which they were unable to express except in words which would be intelligible only to the already converted (i.e. to those who already claimed to understand intensional terminology, and agreed that this account of it was wrong).

In fact, I cannot prove that this theory is extensionally adequate. But I do claim that it is, at least, fairly plausible: any discovery about all the F’s presupposes one or more tests for Fness (one or more answers to questions of the form ‘How do you know it was an F?’) and provides a new test which could be used in the establishing of yet further generalisations about the F’s. It therefore seems reasonable

to envisage a hierarchy of all the accepted sentences about the F's: with the upper regions occupied by synthetic generalisations which have seldom or never provided tests for Fness in the establishment of other generalisations; the middle regions occupied by generalisations which are still synthetic but which—because they are better established, or longer established, or in some way more versatile—have more often been used as tools in the establishment of other generalisations; and the lower regions occupied by the analytic generalisations on which the establishment of all the others depends.

Quine does not talk about the comparative indispensability of sentences; but he does compare sentences in respect of their 'distance from the periphery' of our totality of accepted sentences, and I offer 'indispensability' as a literal version of what (I think) he is getting at with this metaphor.

Two features of the theory at present under discussion appear to give some difficulty:

(1) It has been objected that on this theory of the ASD a sentence may be analytic though false. For although 'analytic at t_1 ' is defined only for sentences accepted at t_1 , the theory seems to allow that one might accept a sentence at t_1 , correctly call it 'analytic' at t_1 , reject it at t_2 , and claim (at t_2) that it was false, though accepted and indeed highly indispensable, at t_1 ; whence it follows that at t_1 it was both analytic and false. But this whole argument rests upon the distinction between 'S was true but is now false' and 'S was false all the time, though we thought it to be true'. This is a perfectly good distinction, of course, but it is a thoroughly intensional one: to the best of my knowledge, it can be elucidated only by means of standard intensional terminology, in such phrases as 'true with the meaning it then had, false with the meaning it now has'. An objection based on this distinction is thus illegitimate unless the

objector is prepared to claim that the distinction is in some way so much clearer and plainer than the other intensional notions that once we have shown their relations with it (and they can indeed be defined in terms of it) there is nothing more that needs to be said. On the Quinean theory I am now exploring, furthermore, this distinction will be made just as everyone makes it; it will have the standard formal relations with the ASD, and thus it will not be the case that any sentence is analytic and false. I shall show in a more convenient place (in the next section) just how this conclusion fails to be derivable.

(2) The theory defines the ASD only for sets of sentences having a general term in common. It draws a line, for instance, between 'Obligatory actions are permissible' on the one hand, and 'Bigamy is sometimes permissible' and 'Obligatory actions are tiresome' on the other, while cheerfully admitting that the first sentence is incommensurable with 'Some mammals are oviparous'. It has been objected that this is a difference between the ASD according to this theory and the ASD as usually drawn; for, it is said, when one says that 'Obligatory actions are permissible' is analytic while 'Some mammals are oviparous' is synthetic, one is making a distinction based on a direct comparison between these two sentences. How one takes this objection must depend upon what is meant by 'direct' comparison. Is a 'direct' contrast made between a mouse and a hamster when a nutrition researcher reports that after the first six weeks of an experiment the mouse was overgrown (i.e. larger than most mice of its age and type) while the hamster was not overgrown (i.e. not larger than most hamsters of its age and type)? If so, then the Quinean theory now under discussion does admit of 'direct' comparison between the members of any analytic/synthetic pair. If not, then what is meant by 'direct'? It seems unlikely that this point could be pressed

further except as the conclusion of an argument most of which would range over more familiar territory. That is, it seems to me to be a dangerous procedure for anyone to try to take a basic stand on the dubious notion of directness, just as it would be dangerous to take a basic stand on the undubious but equally peripheral notion of the distinction between ‘was true, is false’ and ‘was false all along, though accepted’.

The theory I am trying to elaborate appears to be unacceptable to most if not all of those who regard themselves as in a general way opponents of Quine’s views on these matters. I think it is fair to say that the crucial feature to which they object is the theory’s claim that the ASD marks a difference (in a quite straightforward sense) of *degree*, whereas they claim that it marks a difference (in some sense) of *kind*. Perhaps the most concrete result of this disagreement is that, according to the Quinean theory, a great deal of talk about deciding whether something is to be analytic or not is simply out of place. Sometimes we genuinely do not know whether a given sentence has the required degree of indispensability, and then talk about discovery is in order. But there is, on the Quinean theory, a large class of cases where we cannot say whether a sentence is analytic or not simply because the analytic/synthetic borderline is an indeterminate one—there just is no way of stating an exact measure of how much more indispensable S (containing F) must be than most of the other sentences containing F for one to call it ‘analytic’—and in these cases, the Quinean theorist will say, it is inappropriate to talk (with the naive) of discovery, and equally inappropriate to talk (with the sophisticated) of decision. There is nothing to discover, and nothing to decide.

For expository purposes I shall adopt the label ‘PQ’ for an imaginary proponent of the Quinean theory. PQ, then, is a

man who defends the positive thesis that

The workaday employment of the ASD and related intensional terminology can be understood in terms of degrees of indispensability,

and the negative thesis that

none of the arguments which have so far appeared in the literature succeeds in showing that there is any reason for treating the ASD in quite a different way, notably in such a way that it can be called a distinction in kind rather than in degree.

The next section will mainly address the second, negative thesis; but some of its points will be made through discussions of various sorts of challenge to PQ’s positive thesis.

3. Quinean theory v. traditional theory

The most obvious criticism to make of PQ’s theory is that it is simply false, in that ‘analytic’ registers recognition not of some unspecified but high degree of indispensability but rather recognition that denial is not rationally possible *at all* in respect of the sentence called analytic.

This takes us over old territory. PQ’s reply would be: ‘But sentences universally called analytic have come to be denied in face of the facts, and any sentence now called analytic might come to suffer the same fate.’ The proper response would be something like this: ‘Certainly, analytic sentences have come to be said with “It is not the case that. . .” put in front of them. But in calling them analytic in the first place we were talking about the sentences with the meanings they then had; for denial to be rationally possible, the meanings had to change. Or, to put it another way, the word “analytic” strictly applies to propositions rather than to sentences; when we seem to call a sentence analytic, we are really applying the word to the proposition then expressed by the sentence.’

Taking up the part of this which uses the phrase ‘change of meaning’ and its cognates, could not PQ answer somewhat as follows. ‘You have added to my theory, but you have not contradicted it. For, what is it for a meaning to change? Surely it is for a sentence, to the effect that a word applies to certain sorts of things, to have once had and no longer to have a high degree of indispensability: thus change of meaning shades into unexpectedness of application, the borderline between the two corresponding to the ASD in such a way that it is true, as you say, that the denial of a hitherto analytic sentence is the changing of a meaning. But what makes this a *criticism* of what I have been saying?’

In dealing with the part of his critic’s remarks which depends on the word ‘proposition’, PQ could say something like this: ‘So far as I can work out this “proposition” terminology, the proposition expressed by S_1 at t_1 is different from the proposition expressed by S_1 at t_2 if and only if an appropriate set of sentences of the form “ S_1 is true if and only if S_n is true” which are highly indispensable at t_1 are not highly indispensable at t_2 .¹ So that a hitherto analytic sentence can be denied only if it comes to express a different proposition from the one it formerly expressed—a conclusion which I welcome as a perfectly consistent addition to my original theory.’

This dialogue is essentially a discussion of the ASD in terms of the formal relationships holding amongst certain intensional terms. Many more could be given, threading through the network from ‘proposition’ to ‘synonymous’ to ‘necessary’ to ‘impossible’, and so on. We know that this will achieve nothing to our present purpose for, as Quine has

shown, the family is such a tightly knit one that someone who had trouble over one of its members would be likely to have trouble over all of them. In the light of PQ’s positive thesis (his analysis of the ASD), however, the moral to be drawn from the smoothness of passage around the family circle is not so much that trouble with one involves trouble with all as that a theory which is (arguably) extensionally adequate for one will be (arguably) extensionally adequate for all. And with respect to PQ’s negative thesis (his, and my, critique of the standard attempts to elucidate intensional terminology as a whole), the moral is that this kind of approach will be *entirely* unhelpful to someone who does not already understand some members of the circle: if the inter-relations had to be stated in a series of biconditionals which *almost* held—so that room was left for explanations, not involving intensional terminology, of some or all of the ways in which the biconditionals failed to hold exactly—then it might be useful to look to these formal relations for help. As it is, we must turn to explanatory devices of a different sort—to what we can loosely call informal explanations.

Before doing so, mention should be made of one sort of compromise of the smoothness with which intensional terms can be related to one another by simple biconditionals, namely the debates which break out from time to time over these biconditionals themselves: arguments over the equation of ‘possibly possible’ with ‘possible’, of ‘*a priori*’ with ‘analytic’, of entailment with the analytic conditional, of propositional identity with reciprocal entailment, and so on. But the existence of these need not embarrass PQ, for they contain nothing on which the participants agree and

¹ The word ‘appropriate’ covers some fairly complicated conditions regarding general-word-sharing between sentences. A full statement of these conditions would make it clear that sometimes we should find it difficult to say which of two groups of sentences had come to express different propositions, because we did not find it easy to say which of two general words had changed its meaning. This is not a special problem for PQ’s theory, but just an observable fact about the use of intensional terminology.

the acceptance of which would create difficulties for PQ in respect of his positive thesis. Nor could such arguments be claimed to provide any illumination at all for someone who did not understand any intensional terms. Indeed, PQ could with some justice claim that the inconclusiveness of these debates points directly to the need for some such clarification of the ASD as he has offered.

I propose to consider four sorts of informal locution which are frequently used to explain in a non-question-begging way something about the way in which intensional terminology is to be used and, in particular, to give explanations which will result in the ASD's being a distinction in kind, in some sense incompatible with PQ's theory of the ASD. Discussion of these ways of talking will therefore be relevant to both PQ's positive and his negative theses.

(1) The whole problem would be settled in favour of PQ's opponents if a distinction in kind could be established between factual revision and conceptual revision; and it has been suggested that such a distinction begins to emerge if we consider factual disagreements and conceptual disagreements—the latter being understood as disagreements over the practical problem of which conceptual scheme to adopt—and notice that the former are always in principle capable of settlement while the latter may well go on for ever without any lack of candour or energy on the part of the disputants. This suggestion, though, could well be snatched at by PQ as offering the basis for a point in his favour. For the one way in which a factual disagreement may steadily and stubbornly resist resolution is by one disputant's insisting on accommodating any evidence which tells against his thesis by the adoption of supplementary postulates of some appropriate sort. But if he does this to an enormous degree of complexity and arbitrariness, while his opponent can defend *his* view without being driven to such

shifts, it would usually be said that the former was being unreasonable and that he should allow the disagreement to be settled against him. And a conceptual disagreement can be settled (for all reasonable men) in all and only those situations where the adoption of one conceptual scheme has no advantage over the adoption of the other, and has the disadvantage of involving a much greater degree of complexity in what is said about the facts. The criteria for settlement of the two sorts of dispute are, in brief, identical.

It is true that when one party to a dispute persistently refuses (in the elaborate and perverse way just indicated) to lose the argument, he is often said to have turned the dispute into a 'merely conceptual' one. This way of talking suggests that in conceptual disputes the criteria for the reasonableness of a party to a factual dispute do not apply in the same way; and PQ is obliged to account for this use of 'merely conceptual'.

On his own showing, PQ is entitled to point out that someone who seems to depart from the usual criteria of reasonableness in one area of debate may naturally be assumed either to be unreasonable or to have in mind the ramifications of what he is saying into other areas altogether, and thus very likely to be concerned with the long-range benefits to be gained from the denial of one or more sentences which his opponent calls analytic. But such a man might be hoping to derive long-range benefits of simplicity at the cost of complexity in this one area, by propounding a new *scientific* theory, i.e. one which challenges only sentences which would be called synthetic. If the latter is the case then PQ must say that we are simply wrong to say 'He is turning the dispute into a merely conceptual one', and there is an onus upon him to explain why it is that we are so ready to say this when there is always the other possibility.

An explanation, however, seems to be available: As a rule, when one is faced with a recalcitrant experience there is no time for conceptual revision (the long, hard route to an outcome) even when in the long run a conceptual revision would be the most rational move to make; and thus the standard case of conceptual revision is the situation in which there is an accommodation¹ of all the known facts, but its degree of complexity is such as to suggest (in a quiet hour) that it might be worthwhile to try to simplify it, if necessary the hard way. There is a tendency therefore to think of conceptual revision in terms of a move from one accommodation to another, and of factual revision in terms of the situation where one is faced with a recalcitrant experience, i.e. where one does not have an accommodation of all the facts. But there is no reason in principle why a recalcitrant experience should not be given an on-the-spot accommodation which involves conceptual revision, or why an accommodation of all the known facts should not be turned quietly into something simpler by means of a factual revision.

If it be claimed that the point of the remark ‘He is turning it into a merely conceptual dispute’ is simply to say that he is not going to back down in the light of anything else that may happen, then the remark is a simple, though possibly justified, accusation of irrationality. If it doesn’t sound accusatory to the casual ear, then so much the worse (PQ might add) for the effects on the casual ear of bad theories of confirmation and of the ASD.

(2) An elucidatory and anti-Quinean power is often claimed for such locutions as this: ‘The world can’t make me wrong about that, whereas with this other it is always possible that something will happen which will make me

withdraw it.’ But PQ can reply: ‘The first half of what you have just said is true only if you fail to take into account certain sorts of possibility of falsification, namely, all the possibilities the simplest accommodations of which would involve the denial of highly indispensable sentences now called analytic. Of course there is a bump in the scale if you cut part of it off; but if you take the whole situation into account, the continuity is still there. And if your remarks of the form “I can’t be shown wrong about that” refer not to sentences but to the propositions they express, then you have indeed established a discontinuity between “analytic” and “synthetic” when these words are applied to propositions; but this is of no interest, since the “proposition” terminology itself is built out of the “sentence” terminology (in my theory, anyway, and I am still waiting to be shown that it is wrong) in such a way that propositional identity shades smoothly into propositional non-identity; so that the discontinuity which you seem to have established is illusory.’

One comment: This line of argument invites the hostile question ‘Are you saying that until we know whether later developments are going to lead us to withdraw an analytic sentence, we can’t be confident that it is true now?’ This question’s hostility derives from its tacit assumption of the distinction, mentioned earlier, between ‘was true, is false’ and ‘was false all along, though accepted’. There are countless ways in which this distinction can insinuate itself into the debate, but perhaps this one should be dealt with, for its own sake and as an example of the way in which, it seems, we must handle ‘true’ if we wish to beg no questions about intensional terminology. What PQ must say is that if S is accepted at t_1 and rejected at t_2 , the way to settle at t_2 whether S was false at t_1 is to find out whether its rejection

¹ An accommodation of all the facts known to X is a totality of accepted sentences with respect to which none of X’s experiences is recalcitrant.

came about as part of an over-all adjustment which included the rejection of sentences which were at t_1 indispensable enough to warrant the label ‘analytic’. If S was rejected without going as deep as the rejection of anything analytic, then it is proper to describe S as having been false, though accepted; but if its rejection was, or was accompanied by, the rejection of an analytic sentence, then there is no reason at t_2 for saying that S was false at t_1 .¹ The upshot of this is that to be false is to be due for what we might call superficial rejection; and it follows that if a sentence is analytic at t_1 it will never be proper to say that it was false at t_1 ; if it is synthetic at t_1 it may become proper to say that it was false at t_1 ; both of which are just the results we should expect if PQ’s theory is to be viable at all. And, as regards his negative thesis, it is simply a mistake to think that these results can be used to *make* the ASD in the first place ..

(3) ‘I base my acceptance of that simply on my knowledge of the use of words but no one is rationally entitled to accept this other just on such a slim basis as the use of words.’ To this PQ can reply: ‘The trouble with that sort of talk is that it draws the line you wish to draw only by construing, the phrase “use of words” in a highly special way. Is it a fact about how words are used that the word “non-human” applies to everything to which the phrase “born in Antarctica” applies? You will have to say “No”; and if the enquirer into the meaning of intensional terminology then asks you what you *do* count as being “about the use of words”, you will presumably have to follow all the others who have travelled this route and refer him to rules of *meaning* or something of the sort. You cannot avoid the use of “meaning” by appealing to dictionaries: they give all sorts of information which you wouldn’t want to regard as analytic; and if you

appeal not to dictionaries as they sit there on the shelf, but to dictionaries considered as fulfilling the characteristic lexicographic function, then we are back at “meaning” again. So your appeal to “use of words” seems to be just another instance of what I am saying in my negative thesis. And if your original pair of remarks is appropriately amended by substituting “meanings” for “use”, it becomes manifestly harmless to my positive thesis.’

(4) ‘If you denied that, I shouldn’t have any idea of what you were getting at—I should be simply bewildered—but if you denied this other, I should be surprised but I should know what to expect.’ PQ can reply: ‘That is true only because of the way you have selected your cases. If you take some sentence which we both regard as synthetic and which we both have, and know each other to have, powerful reasons for regarding as true and none worth mentioning for regarding as false; and if I then deny that sentence; you will be just as bewildered as you would be if I said that I had drawn a square circle. If I say “It will rain this afternoon” you will take an umbrella; if I say ‘It will both rain and be fine all afternoon” you won’t know what to do—agreed; but if, as we look out of the window at the sunshine I say “It is raining so hard that you shouldn’t go out”, which of the other two situations is this more like?’

This fourth example is the one given by Grice and Strawson, and I am indebted to Mr. Grice for, amongst much else, some comments on my treatment of it. He grants that ‘It is raining so hard that you shouldn’t go out’ may be bewildering *in some circumstances*, but says that it is not *prima facie* bewildering as is ‘It will both rain and be fine all afternoon’. But what does ‘*prima facie*’ mean here? The only relevant sense I can attach to it is ‘bewildering whatever one does or does not

¹ For strict accuracy, the phrase ‘accompanied by’ needs careful qualification. Cf. footnote 4 above.

happen to know about the world’, and even this is relevant only if one excludes that set of facts to which adherents of the traditional ASD constantly appeal—the behavioural facts determining what is to be said about meanings. If this set of facts can be located in a non-question-begging way, then we can save example (4), or even by-pass it and perform the more useful task of saving example (3). But can it be located in the way required? The fact that Grice and Strawson select an approach through bewilderingness suggests, perhaps misleadingly, that they are pessimistic about the chances of making a successful frontal attack on ‘meaning’; such a pessimism would certainly be justified by the literature.¹ In brief, then, it seems that the difference-in-kind alleged in example (4) to constitute a partial elucidation of the ASD has to be understood in terms of the notion of a sentence’s being bewildering to anyone who knows the meanings of its constituent terms even if that is all he knows. Indeed, this fact is explicitly recognised by Grice and Strawson when they say, rightly, that the denial of an analytic sentence will be bewildering only if one assumes that the words involved are not being used in ‘a figurative or unusual sense’. This is a use of intensional terminology in defence of ‘Denials of analytic sentences are bewildering’ which is exactly parallel to the use of intensional terminology which I have just tried to show to be necessary in defence of ‘Denials of synthetic sentences are not bewildering’. In each case it seems that the explanation of intensional terminology—granted that it is intended to be only partial and (perhaps) approximate—cannot be given *at all* without the use of intensional terminology. In the light of all this, it is not clear to me what Grice and Strawson wish to claim when they say that their explanation ‘breaks out of the family circle’. Certainly, it does not ‘break out’ in the

sense of that phrase presupposed in the first section of the present paper.

Nor of course do examples (2) and (3). They, like (4), and like every attempt I have met at an informal but non-question-begging explanation of all or part of the intensional family circle, simply do beg the question. I do not maintain that the family circle cannot be broken out of: indeed, the next section of the present article will constitute an attempt to break out of it. But I have tried to establish that it is not an easy circle to break out of, that a number of plausible attempts to do so fail, and that some case can be made for breaking out of it in the sort of way suggested by Quine’s work on confirmation-theory, i.e. along the lines of the ‘indispensability’ theory expounded above.

4. A non-Quinean theory of the ASD

A rough account of what is to be attempted in this section may be given as follows: Instead of taking the statement that some sentences are traditionally analytic (i.e. in a sense such that the Quinean analysis is not adequate) in every confirmation-situation and then forlornly trying to qualify it, putting ‘proposition’ for ‘sentence’ and the like, in such a way as to make it true, I shall make an independent attempt to establish the weaker statement that in every confirmation-situation some sentence (meaning *sentence*) is traditionally analytic. Just what this means should emerge in the course of the argument.

As a starting-point, let us consider a story of the sort told in illustration of Quine’s thesis that no sentence undergoes, solo, confirmation or disconfirmation at the hands of any experience. For example: We find in Australia those birds which in fact led people to say that there are black swans;

¹ I allude here mainly to the long history of evasion of the problem, particularly of the problem as set by Quine’s powerful statement of the difficulties in ‘The Problem of Meaning in Linguistics’ (chapter 3 *From a Logical Point of View*).

and the finding of them is a recalcitrant experience, in the sense that now that this has happened something of what we have been accustomed to saying must be denied. In this particular case, easily the best thing to sacrifice is ‘All swans are white’ and a few others; but we could save this and instead sacrifice ‘Birds which are thus and so are swans’ together with a good deal of our taxonomy and the natural history depending on it; or we could save all that too, and sacrifice instead ‘Nothing is black all over and white all over’ together with very large stretches of talk which depend upon certain features of our use of colour-terminology; or... etc. There are many intermediate possibilities, such as the introduction of geographical qualifications into the laws of optics, and an acceptance of consequent revisions of physics and neurophysiology; and no remark about the consequences of any particular sacrifice is absolute: we can drive a wedge between any sentence and any other sentence so long as we are prepared to pay an appropriate price.

It is of first importance to notice that this pattern of disconfirmation does not ever allow us to say ‘Well, if I can save S , then I shall save it and there’s an end of the matter’: the end of the matter always comes just after a sacrifice, not just after a save. If this were not so, there would be no such thing as recalcitrance.

A question which can be raised after the saving of any sentence—say of S_1 —is ‘Why must I make some other sacrifice?’ The answer must be of the form ‘Because the set of sentences you now accept is inconsistent with the occurrence of the experience E ’; but Quine must give this answer in the special form ‘Because you accept the sentence S_2 which compels you, now that E has occurred, to sacrifice S_1 .’ One could save S_2 as well, but then some other sacrifice must be made, ‘Because you accept S_3 which compels you, now that E has occurred, to reject either S_1 or S_2 . Now, the trouble

with this is that Quine must refuse to allow the process to come to an end. For the only way in which he can call a halt at, say the n th step is to answer the n th asking of ‘Why must I make some other sacrifice?’ with ‘Because it just is the case, whatever else you may be given to saying, that in the light of experience E you cannot retain the conjunction $S_1, S_2, \dots S_n$; and this would be tantamount to admitting that there is a sentence (albeit a long one) which is, in isolation, strongly disconfirmed by an experience.

There is no logical objection to this infinite regress. The most likely form for it to take would be for members of a small group of logical laws to appear repeatedly, first ‘neat’ then in instances of ever-increasing length, each instance being formed by the substitution *of* laws which have already occurred in the regress *in* laws which have already occurred in the regress. This could go on for as long as one liked, without its becoming simply repetitious.

But although the question ‘Why must some other sacrifice be made?’ can always be answered without repetition—i.e. without appealing to any member of the group of sentences whose joint saving is in question—it is not at all clear that it can always be answered also with truth. Certainly, it is true for only a finite number of distinct values of s that s is in a literal sense a sentence which Smith calls true: Smith has considered at most a few million sentences, many of those he calls false, and of the rest only a few dozen are likely to be relevant in a given confirmation situation. So we must look for some sense in which we can say that each sacrifice is forced upon Smith by a sentence which he already regards as true, without our having to admit that the relevant sentence has in fact ever been explicitly considered by Smith.

It might seem possible to avoid the difficulty by construing ‘Smith calls S true’ at least sometimes as ‘Smith calls true something which leads by logic to S ’, thus making it possible

for Smith to call true an infinity of sentences, gathered into bundles each of which consists of the logical consequences of some sentence which Smith *explicitly* calls true. But this device does not solve the problem, for the conditions under which something ‘follows by logic’ from something else are precisely what the Quinean theory is about anyway. Whether we give the centre of our attention to the possibility of gathering sentences into bundles, or to the more general problem of sacrifices and saves, it remains true wherever Quine says that one sentence follows by logic from another he must allow each step in the ‘following from’ to be the locus of a possible sacrifice of something called true. Therefore, no attempt of this sort to tie ‘sentences called true’ into bundles can effect any reduction in the number of sentences explicitly called true, for (to put it another way) in each bundle there can be no more member-sentences than there are sentences holding the bundle together, and each of the latter sentences must be either explicitly called true or be a member of a further bundle which is held together by further sentences each of which is either. . . and so on, ad infinitum.

Consider Achilles and the Tortoise in Lewis Carroll’s story. Their trouble had its origin in the Tortoise’s refusal to allow any sort of move from premiss to conclusion—his tacit departure from the usual convention whereby any move from antecedent to consequent of an analytic conditional is deemed legitimate, without replacing this convention by either a more or a less liberal one. The result of this is, so to speak, a refusal to treat anything as analytic: every step must be explicitly justified before it can be taken and, since justifying is itself taking a step, this means that no step can be taken at all.

This relates closely to the difficulty confronting Quine. Although his stress is not upon the alleged need explicitly to justify each step in an argument but rather on the alleged possibility of making any step illegitimate by the taking of appropriate avoiding action, the former implies the latter and therefore shares its difficulties: for the only way in which it can be the case (as Quine seems committed to saying it is) that any logical move from one sentence to another can be avoided by the denial of some other sentence the assertion of which is necessary for the legitimacy of the move, is for it to be the case (as the Tortoise pretends it is) that for any logical move from one sentence to another there is some sentence the assertion of which is necessary for the legitimacy of the move.¹

Another suggestion for the required sense of ‘calls true’ is simply that of ‘is disposed to call true’, which would solve the problem of finitude at once. Following out the consequences of this suggestion: Smith registers E’s recalcitrance; decides (perhaps) to retain every relevant sentence he has ever formulated; but then—being honest and energetic—casts around to formulate and then reject some sentence which he has never explicitly considered before but which has the following two properties: **(i)** If it had been put to him before E occurred he would have called it true (and thus it is, in the sense of this paper, a sentence which was until E’s occurrence a member of the set of sentences ‘accepted by’ Smith); **(ii)** Formulation and rejection of it provides an accommodation of E—i.e. modifies Smith’s set of accepted sentences in such a way that E is no longer recalcitrant with respect to it.

¹ Here too I am indebted to Quine. See his ‘Truth by Convention’ in O. H. Lee (ed.), *Philosophical Essays for A. N. Whitehead* (New York, 1936), where considerations of this sort are argued with force and clarity against logical conventionalism but not, of course, against Quine’s current position, which he did not at that time hold.

Suppose, though, that Smith's energy is not equal to his honesty, and that his reaction to the recalcitrant experience goes like this instead: he decides to retain every relevant sentence he has ever formulated; he acknowledges that there must be some sentence which he has never thought about but **(a)** which he would in the past have called true if it had been put to him, and **(b)** which he must not in future call true if he does ever confront it in an explicit form; he decides not to go hunting for it now but to forget the whole matter until such a sentence does turn up; but even then he does not guarantee to reject the first such sentence to turn up. Can he not claim that by thus disposing himself to recognise and reject some such sentence he is, a fortiori, disposing himself to reject some such sentence? And is not this all that is required for him to have effected an accommodation of E? It is clear that if this pattern of 'accommodation' is followed often enough, we shall begin to question Smith's honesty: it will before long be fair to say 'He doesn't back down on anything: he keeps saying that he could straighten it all out by means of [no doubt] a conceptual revision, but he never produces the conceptual revision.' But, while it seems clear that this would be a legitimate charge, it is not easy to see why it should be so if the original suggestion—that the recalcitrance-producing pressure could come from a sentence Smith has been disposed to call true but has never formulated—is correct. For if we combine the Quinean claim that whatever sentences we retain in the face of E there is always some remaining way of accommodating E, with the current proposal that recalcitrance may be created by a combination of sentences-thought-of-but-still-retained with sentences-still-unformulated, there seems to be no reason at all why the ever-possible saving adjustments in face of E should not remain in the latter category of sentences-still-unformulated .

Someone who combines these two views is, of course, entitled to a natural suspicion of Smith's forever unsubstantiated claims to be able in practice to carry out the required formulations and rejections; but there is no reason why Smith should make such claims in the first place. On the view I am now considering, there is no reason why Smith should not admit that *he* cannot *show* that it is all right for him to say the things that he does say, and simply adduce general Quinean theory as his reason for saying that nevertheless there must always *be* some way in which this could be shown. In brief: We have here two kinds of generosity—Quine's about our freedom of choice in making adjustments, and the other about our right to keep silent—which together produce the result that there is nothing theoretically wrong with refusing to let experience modify anything we actually say.

I conclude that neither the 'follows by logic' nor the 'disposed to call true' approaches will solve the difficulty with which this section has been concerned; and the apparent absence of any viable alternative solution leads to the conclusion that in any experiential situation, if the experiences involved are to offer a challenge to any sentences then there must be some sentences to which they offer no challenge at all—some sentences which simply are not up for possible revision in the particular situation concerned. This is what was meant by the declaration with which this section began: in every confirmation-situation, some sentence is traditionally analytic.

It may look as though this claim is weak not only in respect of its placing of the crucial quantifier, but also in respect of the way in which that quantifier is to be understood; that is, it might be suggested that the *only* force of saying that in any confirmation situation there are sentences which are not up for revision is simply to deny that there are no

such sentences, not to suggest any way in which we could sometimes *find* one. But although the arguments so far used have been of the form ‘There are such sentences, because we cannot allow that there are not’, more can be said than this. I have come to it by a route through the enemy’s camp—through general objections to Quinean theory rather than by the positive development of a contrary theory—primarily because the statement that there are sentences of this sort can be argued for without providing a way for finding any, relative merely to confirmation *situations*; while to be able to say of a given sentence that *it* is of the required sort we must be able to relate it not just to a confirmation situation but to an individual person propounding an *argument* about that situation.

A constructive account of ‘analytic in the argument’ must proceed through an account of ‘involved in the argument’. To discover what sentences are involved in the argument whereby Smith concludes ‘Because E has occurred, S_1 is true’, we must ask Smith, for there is always a choice of routes for any given experience-sentence pair. How does Smith decide that, say, S_2 is involved in his argument? Surely, by seeing that his reason for saying ‘If E has occurred, S_1 is true’ is that he accepts as true both S_2 and ‘If S_2 is true then if E has occurred then S_1 is true’; and he accepts this last as true because he accepts both S_3 and ‘If S_3 is true then if S_2 is true, then. . .’; and so on backwards, but not ad infinitum. For at some stage he will say something like ‘I accept S_n as true and it *says that* if S_{n-1} is true then. . .’. The phrase ‘says that’ does not matter; what is important is Smith’s arrival at a stopping-place (or at stopping-places; but for brevity I shall deal only with cases where the ‘involvement’

sequence does not ramify) at which he says ‘There is nothing more to say. Accepting S_n is accepting. . . , and not through the mediation of anything else, either.’

The terminal sentence in the ‘involvement’ sequence could be said to be analytic in that argument. Normally it will not be stated in the argument, but if it is stated it will be labelled as a rule of inference or in some other way which would make it clear that no further-back sentences are admitted by Smith to be in need of statement at all in this argument. As a rule, Smith will choose the terminus which most people would choose in such an argument, because as a rule he will wish to use words in their normal senses and not propose any conceptual revisions. This way of putting things presupposes—what I should wish to defend—a definition of ‘analytic’ as ‘analytic in most arguments’, and a consequent development of the rest of the standard intensional terminology on this basis.¹

A sentence may fall short of Smith’s terminus and still not be considered by him as on the cards for possible revision; but his terminal sentence and all that lie behind it are put off the cards for possible revision by the very shape of Smith’s argument—i.e. by his insistence that once he has worked back to S_n there is nothing more to say—and it is with this impossibility of revision that I am here concerned. Of course, S_n might be considered for revision, or at least located short of the terminus, in another argument; but sensible criteria for the identity of arguments would demand that it be considered another argument. I grant that this is an elementary definitional matter, but it is not a definitional matter that this definition has application. It can be cashed only because we have a straightforwardly empirical sense

¹ ‘Terminus’ and its cognates are used in Morton White’s *Toward Reunion in Philosophy* (Cambridge, Mass., 1956); but White does not argue for his view that ‘we do not think systematically without’ terminal sentences (p. 288), and anyway there is only a superficial resemblance between his sense of ‘terminal’ and that of the present paper.

for the notion of a complete argument (and a set of logical considerations to confute those who take the line that the appearance of completeness is always misleading and that no actually occurring argument is really complete in the required sense), and this gives us a straightforwardly empirical sense for the notion of argument non-identity. Contrast this with what happens when PQ's theory is applied to standard remarks about 'different meaning', 'different use', 'different proposition' and the rest.

The conclusions reached so far in this section have a certain tameness, stemming particularly from the fact that the identification of any given sentence as analytic in a given argument may well lack the confidence of the claim that some sentence must be analytic in the argument. But there are lessons to be learned from the development of a doctrine of analyticity in this way. For brevity, I shall state them in an assured and unqualified fashion which may well not be warranted by the arguments which I have presented.

The situation is this: Quine claims that sentences are never used in the way in which his critics say that analytic sentences are used, namely in such a way that they are not capable of revision in the light of the facts. The standard reply to this is that there are two sorts of revision, conceptual and factual, a claim which (as the device of PQ has been used to show) cannot in any obvious way be made good. The

upshot of the arguments advanced in the present paper is that Quine is wrong—that there is, and indeed must be, an analytic use of sentences in a traditional sense of 'analytic'—but that Quine's critics, while underestimating the force of his arguments and the strength of his position, have granted him too much. In particular, they have apparently granted him that any sentence is at all times capable of revision of one sort or the other; and this has put them in the position of having to establish an important difference of kind between the situation where an analytic sentence is denied and that in which a synthetic sentence is denied. On the basis of the arguments I have offered, all that is required is the establishment of an important difference of kind between the argument in which a sentence is up for possible revision of some sort and the argument in which it cannot be up for revision at all. If the arguments of this section are in order, the difference between the two arguments is absolute—it is, for instance, not capable of analysis in PQ's way—and if Quine or PQ should object that sensible people never treat sentences in such a way as to rule out the question of their possible falsification, we are in a position to reply that sensible people must sometimes treat sentences in this way if they are to be capable of constructing arguments at all.