

## ON QUINE, ANALYTICITY, AND MEANING

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In sections 5 and 6 of "Two Dogmas" Quine uses holism to argue against there being an analytic-synthetic distinction (ASD). McDermott (2000) claims that while Quine's arguments call into question the importance of an ASD, they are not successful in showing that there cannot be one. McDermott has convinced me. Although my interpretation of the form that Quine's arguments take is slightly different to his, I think the objections apply equally well in both cases. In part I of this essay I will present my interpretation, describe how I think it differs from McDermott's, and then adapt his objections to argue against Quine.

Intuition says that what we say is a product of what we believe and what our words mean, and that any theory that purports to explain our linguistic behaviour will contain mentalistic terms like 'believes' and 'means'. Against this, Quine says that for such a theory to be scientifically respectable terms like 'believes' and 'means' ought to be defined purely in terms of the empirical content of the theory - observable linguistic behaviour - and so while they may help to keep the theory neat and tidy, it cannot explain linguistic behaviour any better than it could without them. But without them, it seems that we cannot explain linguistic behaviour well enough to be able to make definitive translations from one language into another - that there is no such thing as a 'correct' translation. Some work of David Lewis, however, suggests that it's possible to introduce mentalistic terms into a scientifically respectable theory such that they (i) can be defined in terms of linguistic behaviour, and (ii) can help explain linguistic behaviour. I will look at this in part II.

### PART I: HOLISM AND THE ASD IN "TWO DOGMAS"

According to McDermott, in section 5 of "Two Dogmas" Quine attacks two purported definitions of 'analytic': 'true in virtue of meaning alone and independently of fact', against which he argues by appealing to a truth-conditional (phenomenalist) formulation of empiricism; and 'vacuously confirmed, ipso facto, come what may', against which he argues by appealing to a verificationist formulation of empiricism. In each case, Quine uses a form of empiricism to show that the target definition of 'analytic' does not work.

I interpret Quine, however, as arguing that neither form of empiricism can be used to make *any* definition of 'analytic' work. That is, rather than using two forms of empiricism to argue against two definitions, he argues against using two forms of empiricism to give any definition. The difference is slight but important, particularly when it comes to assessing the arguments. For example, McDermott objects to Quine appealing to a phenomenalist version of empiricism, because "phenomenalism is false" (p. 9). But on my interpretation, if phenomenalism is false then that *helps* Quine - a false theory cannot be used to define 'analytic', no argument needed. Nevertheless, I think the objections McDermott raises against the arguments as he interprets them apply equally well against the arguments as I do. So either way Quine is in trouble. I won't make any more comparisons. I will just say what *I* think Quine says, and then object à la McDermott.

I think that Quine's aim in section 5 is the same as in sections 1 to 4 - to show that specific definitions (or types of definition) of 'analytic' fail. I don't think his aim is to show that they *all* fail - that's left for section 6. In sections 1 to 4 he looks at attempted definitions in terms of meanings, definitions, interchangeability, etc., and shows that they are at root circular. In section 5 he considers whether or not it can be done by appealing to what he calls 'the verification theory of meaning'.

According to Quine, the verification theory of meaning says that "the meaning of a statement is the method of empirically confirming or infirming it" (p. 37). This is an unusual way to put it - does he mean that if a Bunsen burner is used to confirm a statement then that's part of its meaning? Probably not. He might mean what we would call *conditions* of confirmation rather than methods of confirmation. Or by 'the method of empirically confirming or infirming it' he might mean the particular formulation of empiricism that is used to confirm or infirm it (specifically, either of the two that he goes on to consider). It's not clear, so I'll stick to Quine's usage.

If the verification theory of meaning makes sense, then an analytic statement can be defined as that limiting case which is confirmed no matter what. Or, if talk of meanings is problematic, the verification theory can pass over it by saying that statements are synonymous if and only if they have the same method of empirical confirmation and infirmation, and that an analytic statement is one that is synonymous with any logical truth. If we can make sense, then, of methods of confirmation and infirmation of statements then we can make sense of 'analytic'. Quine's task is to show that we can't. He starts by asking what these methods of confirmation and infirmation are. How does experience confirm or infirm a statement?

He considers two candidates. The first he calls 'radical reductionism' (McDermott calls it 'phenomenalism'). This is the view that every meaningful statement can be translated into a statement about immediate experience. According to this view, then, the verification theory of meaning says that a statement is confirmed/infirmated by a given experience if what it says about that experience is true/false. The second he thinks of as an "attenuated form" of the first and doesn't give it a name, but McDermott calls it 'verificationism'. This is the view that to each statement there is associated a set of experiences that would add to the likelihood of the statement being true, and a set of experiences that would detract from that likelihood. According to this view, then, the verification theory of meaning says that a statement is confirmed/infirmated by a given experience if that experience adds to/detracts from its likelihood of truth. It may be objected that I must be misinterpreting Quine to ascribe him the belief that radical reductionism is just a form of verificationism - that is, the belief that truth conditions are special-case verification conditions - because verificationism is usually thought of as a more plausible *alternative* to radical reductionism. But what he says is quite clear (p. 38, second and third paragraphs).

Quine claims that these are both false because two kinds of holism are true: it is not individual statements, but *whole theories* that are made true or false by experience (call this *phenomenalistic* holism), or that have their likelihood of being true or false increased or decreased by experience (call this *verificationist* holism).<sup>1</sup> He says that "our statements about the external world face the tribunal of sense impressions not

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<sup>1</sup> Quine does not use the word 'holism' here, let alone make an explicit distinction between two kinds. This is my interpretation (and McDermott's).

individually but only as a corporate body" (p. 41), and that "the unit of empirical significance is the whole of science" (p. 42). Quine implies that because the views are both false, neither can be used to give any definition of 'analytic'.

What should we make of this argument? I have four comments.

First, it is surprising that Quine would be prepared to even consider 'confirmed no matter what' as a definition of analytic. Any statement with vacuous verification conditions would, by this definition, be analytic - even metaphysical nonsense like 'the Absolute enters into, but is itself incapable of, evolution and progress'<sup>2</sup>. It picks out more than just those statements we intend 'analytic' to apply to, and so is obviously inadequate.

Second, Quine takes each kind of holism as a premise without arguing for its truth. He does make two observations about Carnap's work in the *Aufbau*: (i) that his attempt to initiate a program of radical reduction failed, and (ii) that the truth values of statements within a theory were to be revised in such a way as to maximize and minimize certain *overall* features. He also makes the comment that this holistic approach is "a good schematization of what science really does" (p. 40). But these form at best a suggestion that holism is true, not a convincing argument. Nevertheless, the holism espoused seems plausible and is (I'm told) widely accepted. So let's grant it.

Third, even if Quine is right about radical reductionism and verificationism being false (when *statements* are taken as the units of empirical significance, that is), the possibility remains that sense can be made of the verification theory of meaning in some *other* way. Quine has not shown that there is no *possible* way of successfully defining statement confirmation and infirmation, just that there is no *existing* way. In this respect, his argument is no more conclusive against the possibility of defining 'analytic' than those in sections 1 to 4.

Finally, Quine uses holism to show that certain definitions of 'analytic' cannot work, but he seems to overlook the fact that the same holism can be used to give definitions that *do*. He says that "in general the truth of statements does obviously depend both upon language and upon extralinguistic fact" (p. 41), and that "taken collectively, science has its double dependence upon language and experience" (p. 42). So Quine seems to take it that although the truth an individual statement does not have a linguistic component and a factual component, the truth of its parent theory does. If that is right then we can define an analytic statement as follows. Keep the linguistic component (language) fixed. Let the factual component vary. Different factual components make different statements true. Take the (possibly empty) class of statements that are true no matter how the factual component is - the ones that are true in virtue of the linguistic component alone. Then surely the statements in this (well-defined) class deserve to be called 'analytic'? If Quine would prefer to say that different factual components confirm or infirm different theories (rather than making them true or false - that is, if he would prefer his holism to be thought of as a verificationist holism rather than as a phenomenistic holism) - then we can proceed, instead, as follows. Say that two theories are empirically equivalent if they have the same confirmation conditions - that is, if they are confirmed/infirmed by the same set of experiences. Say that two statements are synonymous when the replacement of one by the other in a theory always yields an empirically equivalent

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<sup>2</sup> An example used by Ayer in *Language, Truth and Logic*.

theory. Then define an analytic statement to be one that is synonymous with some uncontroversially analytic statement (e.g. any logical truth). Again, we get a well-defined notion of analyticity. The possibility of these definitions is opened up as soon as Quine claims that the truth of a theory can be analysed into a linguistic and a non-linguistic component, so if he wants to maintain that 'analytic' has no clear definition then he must drop this claim.

So I don't think that Quine has established that the verification theory of meaning cannot be used to give an adequate definition of 'analytic'. On the contrary, if he is right in saying that the truth/verification conditions of theories have a distinct linguistic and factual component then it seems pretty clear how such a definition can be given.

What about section 6? In the first paragraph Quine describes a view according to which our beliefs form a deductive system, logically interconnected in such a way that we have much latitude in choosing how to revise them in order to achieve agreement with experience. "No particular experiences are linked with any particular statements ... except indirectly through considerations of equilibrium affecting the field as a whole". I take it, first of all, that Quine thinks this justifies the holism appealed to in section 5. Indeed it seems to imply holism in that form - that statements have no consequences for experience by themselves. (It seems to me, in fact, that this is what Quine had in mind all along.) But secondly, and more significantly, he uses it to form what seems to be an argument against the *possibility* of any analytic-synthetic distinction. Up to this point, his arguments have consisted in finding fault with specific attempts to define 'analytic' and thereby to draw an ASD. But in the second paragraph he argues that *all* such attempts must fail. He says:

If this view is right ... it becomes folly to seek a boundary between synthetic statements, which hold contingently on experience, and analytic statements, which hold come what may. Any statement can be held true come what may, if we make drastic enough adjustments elsewhere in the system. ... Conversely, by the same token, no statement is immune to revision.

What are we to make of this? It seems plausible that our beliefs are logically interconnected in the way that Quine describes, that any statement can be held true come what may and that no statement is immune to revision. So let's grant Quine all of that. For some reason he thinks it follows that there can be no boundary between statements that hold contingently on experience and those that hold come what may. Which statements hold come what may? The question is ambiguous. Does it ask which statements *can* be held true come what may? Then the answer is all of them. Does it ask which statements *must* be held true come what may? Then the answer is none of them. Does it ask which statements *are* held true come what may? Then the answer depends on which statement-reviser (i.e. person) we are talking about. If it's me, then the answer is a non-empty and proper subclass of statements that includes 'All bachelors are unmarried' (I choose to hold this true, come what may). If it's a group of people, then the answer might be that class of statements that are held true come what may by *every* person in the group, or it might be that class of statements that are held true come what may by *at least one* person in the group. We could go on to give other interpretations, but in each case the answer is a unique and well-defined class of statements - those that 'hold come what may'. And its complement will be an equally unique and well-defined

class of statements - those that 'hold contingently on experience'. So why does Quine think it's folly to seek a boundary between the two? I agree that it *is* folly until Quine disambiguates 'holds contingently on experience' and 'holds come what may', but once he does that the boundary is there, clear and sharp.

Nevertheless, Quine's argument does seem to suggest something about the importance of an ASD. Intuitively, an analytic statement is one whose truth we can decide without consulting experience - we just examine the meanings of the terms involved. If it's true then it holds true independently of experience - come what may. But if any statement *can* be revised in the light of certain experiences, as follows from Quine's view, then analytic statements can only be analytic as a matter of choice - *our* choice. If we wanted to, we could revise the sentence in the light of certain experiences. But we choose not to. Why? Probably for pragmatic reasons - because it's convenient. This suggests that there is nothing *epistemologically* important about analytic statements - we do not know them with any more certainty than synthetic statements. Analytic statements are analytic because we choose them to be so, and the extent to which we know a statement to be true cannot be a matter of choice.

## PART II: THE FUNCTIONAL DEFINITION OF THEORETICAL TERMS

Suppose I come across a native using the word 'Gavagai', and that after some investigation I translate it into my language as 'There is a rabbit'. Intuition says that I have found a linguistic item in my language that has the same *meaning* as 'Gavagai'. What does it mean to say they have the same meaning? Quine gives an answer in terms of linguistic behaviour. He says that they are synonymous (he uses 'are synonymous' rather than 'have the same meaning' to avoid being taken as believing in things called 'meanings'), if and only if 'Gavagai' commands the native's assent or dissent under the same circumstances in which 'There is a rabbit' commands my assent or dissent. (That's pretty rough. The actual definition he gives is more complicated, but this will do for present purposes.)

But I will assent to or dissent from 'There is a rabbit, and there have been black dogs' in exactly the same circumstances as 'There is a rabbit', so by Quine's definition of synonymy that would count as an equally good translation. But, intuitively these have different meanings, so at least one of them must be wrong - they can't *both* have the same meaning as 'Gavagai'. This will be the case no matter what I propose as the translation of 'Gavagai' - there will always be another candidate that has the same meaning according to Quine's definition, and yet has a different meaning according to intuition. It seems, then, that Quine's definition of synonymy in terms of linguistic behaviour is inadequate.

It might help to appeal to beliefs. We could say that 'Gavagai' and 'There is a rabbit' are synonymous if and only if they express the same *belief*. What does it mean to say they express the same belief? Quine thinks, again, that 'expressing the same belief' must be defined in terms of linguistic behaviour - perhaps as: 'Gavagai' expresses the same belief as 'There is a dog' if and only if 'Gavagai' commands the native's assent or dissent under the same circumstances in which 'There is a rabbit' commands my assent or dissent. That is, if and only if 'Gavagai' and 'There is a rabbit' are synonymous. There is a circle here that Quine thinks we cannot break out of. Translation can only proceed, he says, on

the basis of observable linguistic behaviour. So any mentalistic terms that are introduced to help the process, such as 'meaning' or 'belief', must ultimately be definable in terms of that behaviour. Linguistic behaviour must be used to explain mentalistic terms and not the other way around - mentalistic terms cannot be used to help explain linguistic behaviour.

But David Lewis (1970, 1972) has a theory about the definition of theoretical terms that might show Quine to be wrong on this point.

He begins his account with the following example (1972, p.250). We are gathered in the country house drawing room to hear the detective's theory. He launches into it, using the names 'X', 'Y' and 'Z' for the three people he believes conspired to commit the murder. He doesn't know who they are yet, but he knows quite a bit about them and about how they did it, and this is all given.

The detective's theory contains many terms that we already understand - all of the terms that he uses, for example, to describe the observable facts of the murder. Call these O-terms (think of 'O' as standing for 'old'). It also contains the three new terms, 'X', 'Y', and 'Z'. Call these T-terms (think of 'T' as standing for 'theoretical'). Before the detective presented his theory they had no meaning for us, but afterwards they did. Nothing else was done to give them meanings, so they must have got their meanings from the theory. That is, the theory in some way *defines* the T-terms.

How does it do that? We can think of the detective's act of presenting the theory as the assertion of a single sentence involving the terms 'X', 'Y' and 'Z'. Call the theory T, call this sentence the *postulate* of T, and write the postulate as:

$$T[X,Y,Z].$$

Lewis says that in asserting  $T[X,Y,Z]$  the detective has implied that he believes his theory is *realized*. That is, that there are three people who fit the descriptions given in the theory. So he has also asserted the *Ramsey sentence* of T:

$$\exists(x,y,z)T[x,y,z].$$

Furthermore, Lewis says that by taking 'X', 'Y' and 'Z' to be *names* he has implicitly asserted that his theory is uniquely realized. So he has also asserted the *modified Ramsey sentence* of T:

$$\exists_1(x,y,z)T[x,y,z].^3$$

In giving his theory, then, the detective has implicitly made the following logically equivalent claim:

$$(X,Y,Z) = \iota(x,y,z)T[x,y,z].^4$$

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<sup>3</sup> The symbol  $\exists_1$  is used to assert unique existence.  $(\exists_1 x)Tx$  should be read as 'There is exactly one thing x such that Tx'.

<sup>4</sup> The  $\iota$  is supposed to be upside-down, but I couldn't find that symbol amongst my fonts.  $\iota xTx$  is to be read as 'The thing x such that Tx' - a definite description.

That is, that 'X', 'Y' and 'Z' name the first, second and third members of the triple that realizes the theory. Lewis claims that this is how the theory has defined the new terms 'X', 'Y', and 'Z'. He calls it a *functional* definition.

There are two important things to notice. First, using the functional definition of the T-terms ('X', 'Y', and 'Z') we can express them purely in terms of the O-terms, and then eliminate them completely from the detective's theory. That is, the detective's theory can be expressed, if so desired, using the O-terms alone. Second, introducing the T-terms 'X', 'Y' and 'Z' as names for three people *helped* the detective explain (or purport to explain) the facts of the murder (and may even have been necessary - could the facts have been explained by a theory that didn't propose any external human involvement?). Putting these together we get the following. Take the O-terms to be all the terms that are used to state the facts of the murder, and the T-terms to be the new ones ('X', 'Y' and 'Z') introduced by the detective. If his theory is right then the T-terms were helpful (and maybe necessary) in explaining the facts of the murder, even though they themselves can be expressed in terms of the O-terms alone and eliminated from the theory.

The relevance of this to Quine's claims about mentalistic terms should be clear. Quine claims that introducing a term such as 'belief' is no help in explaining the native's linguistic behaviour because it must, in turn, be defined in terms of that behaviour. Well, think of my task in explaining the native's linguistic behaviour as the same, in principle, as the detective's task in explaining the facts of the murder. Let the O-terms be all of the terms that I use to describe the native's linguistic behaviour. Suppose that I introduce the term 'belief' into a theory that purports to explain that behaviour. Then this is a new term - a T-term. Just as the detective introduced 'X' without first defining it, I can introduce 'belief' without first defining it - I just start to use it by talking about what the native believes. In so doing, I give the term a functional definition and could, if I wanted to, later eliminate it from my theory. But, as in the case of the detective, being definable in terms of the O-terms doesn't mean that 'belief' is not helpful in explaining them. It may even be necessary.

So if Lewis's account of the functional definition of 'X', 'Y' and 'Z' in the case of the detective's theory about the murder is applicable to 'belief' in the case of my theory about the native, then Quine's reason for claiming that mentalistic terms have no place in scientific translation is undermined, and he must either abandon the position or give a different reason. So the question to be answered now is this: are mentalistic terms like 'belief' functionally definable in the way that 'X', 'Y' and 'Z' are? In the remainder of the essay I want to point out a few ways that Lewis's account needs to be tidied up or modified if we want the answer to be 'yes'.

First. 'X', 'Y' and 'Z' were names. Can we define general terms in the same way? Yes. We can just think of them as names: we can think of 'A is big', for example, as 'A has bigness', where 'bigness' refers to a set or a property or whatever we like. This is important if we want general mentalistic terms like 'believes' to be functionally definable.

Second. As the theory stands, the detective's theory is true, and 'X', 'Y' and 'Z' refer, if and only if it is *perfectly* realized - that is, if and only if there are three people who exactly fit the descriptions given. But even if it is not perfectly realized it might be *nearly* realized. Suppose the detective said that Y went into the attic at 11:17. As it

turns out, there is someone who exactly fits the detective's description of Y, except that he went into the attic at 11:37. In this case, we'd like to say that near enough is good enough and that 'X', 'Y' and 'Z' still refer to the same three people. In general, we should say that the theory is true if and only if it has a nearest and near enough realizing triple, in which case 'X', 'Y' and 'Z' refer respectively to the first, second and third members of the triple. If no triple comes nearest and near enough, then the theory is false and 'X', 'Y' and 'Z' do not refer. This might be seen as an unnecessary complication, because there will always be a restricted version of the theory that the nearest and near enough realizer will *perfectly* realize, and so talk about perfect realizations rather than near-realizations should be sufficient. But that would be too restrictive. It might be impossible to settle upon any restriction of the theory that we expect to be perfectly realized. Consider any single statement about 'X', 'Y' or 'Z' in the detective's theory. Suppose that the theory is perfectly realized, except for that one statement. Would we call that near enough? It's hard to think of any single statement for which we wouldn't. Rather than thinking that a single set of statements should be perfectly realized, we're more likely to think that a large set of statements should be realized, without caring too much which particular set that is. That's why it is best to talk about nearest and near enough realizers, rather than perfect realizers.

Third. McDermott (1988) argues that if this account of how theoretical terms are defined is restricted to theories that can be expressed in words, then it would not apply to terms like 'Pain'. He says that there is at least one fact about pain that must be satisfied by any nearest and near enough realizer of a satisfactory defining theory - what it *feels* like. He says that if I have a sensation that doesn't feel like pain, then no matter how much it might be like pain in other ways - being distracting, causing groans, etc. - I will not call it 'Pain'. And, he claims, what pain feels like cannot be put into words. So unless we want to rule out the possibility of functionally defining 'Pain', and possibly other mentalistic terms as well, then we must allow that they can be defined by theories that cannot be fully expressed in words.

This is just a start. But it *is* a start, and should at least be sufficient for the functional definition approach to cast doubt on Quine's position. One final point. As we have seen, a functionally definable theoretical term can be eliminated from the theory that defines it. But that does not mean that the entity it purports to name is a mere fiction. Quine himself urges that if our best scientific theory says that a certain entity exists, then we should *believe* that it exists. So if it turns out that our best scientific account of the native's linguistic behaviour says that the native has beliefs and that statements have meanings, then we should *believe* that the native has beliefs and that statements have meanings, in just the same way that if our best physical theory about the world says there are electrons then we should believe there are electrons. If that's how it turns out, then Quine will be obliged to accept that there *are* beliefs and meanings.

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