

Can a sentence's meaning suffice for its truth?

1 The target concept of analyticity

Several philosophers have offered an argument like the following against the notion of analytic truth.

What could it possibly mean to say that the truth of a statement is fixed exclusively by its meaning and not by the facts? Isn't it in general true—indeed, isn't it a truism—that for any statement **S**,

S is true iff for some **p**, **S** means that **p** and **p**?

How could the mere fact that **S** means that **p** make it the case that **S** is true? (Boghossian, 1996, p.364)

Thus Paul Boghossian; but he is not alone. This particular passage is approvingly cited by Elliott Sober (Sober, 2000, p.252) as well as Margolis and Laurence (Margolis and Laurence, 2001, p.294). The seed of the idea is found in Quine's "Carnap and Logical Truth" (Quine, 1976, p.113), and is developed by Harman (Harman, 1967, p.128). Though my discussion here will focus on Boghossian's presentation of the argument, the view he expresses is widely shared.

Boghossian dubs his target 'metaphysical analyticity.' What does this phrase mean? Boghossian does not give a single, canonical definition, but he does offer the following three

(supposedly equivalent?) characterizations. A sentence **S** is metaphysically analytic if (i) **S** “owes its truth-value completely to its meaning, and not at all to the facts” (363); (ii) **S**’s “truth . . . is fixed exclusively by its meaning and not at all by the facts” (364); (iii) “the mere fact that **S** means that **p** make[s] it the case that **S** is true” (364).¹ Unfortunately, describing a sentence’s truth-value as (i) *owed completely to* or (ii) *fixed exclusively by* something is somewhat vague and/or metaphorical. However, (iii) might be given a clear and distinct sense, since some very able philosophers are developing a theory of truthmakers. Nonetheless, since there is no uncontested account of truthmakers, I would rather not saddle Boghossian (and Quine *et al.*) with the particular details of another philosopher’s truthmaker theory. (That said, leading truthmaker theorists are at variance with Boghossian’s view: they suggest either that logical truths have no truthmakers (Mulligan et al., 1984, p.301), or that “analytic truths[?] . . . truthmakers are to be found in the meanings of the words in which they are stated” (Armstrong, 2004, p.111).)

There is another way to characterize metaphysical analyticity, very much in the spirit of the above formulations, using a concept philosophers find more clear and familiar, namely, that of a *sufficient condition*:

(MA) **S** is metaphysically analytic if the meaning of **S** suffices for the truth of **S**.

In other words, **S** is metaphysically analytic if the facts about what **S** means constitute a sufficient condition for **S**’s truth. I will take the target of Boghossian-style attacks to be the claim that there exist sentences that are metaphysically analytic in the sense of (MA), for three reasons. First, most philosophers likely consider the notion of a sufficient condition more perspicuous and less contentious than those of owing, fixing, or making true. Second, conceptualizing metaphysical analyticity in terms of sufficient conditions closely parallels Boghossian’s characterization of epistemic analyticity, which he articulates more precisely

¹Sober puts matters in terms of meaning-facts “settl[ing] whether a sentence is true” (Sober, 2000, p.252); this does not strike me as a fundamentally different idea from those Boghossian offers.

and defends at length. He says that **S** is epistemically analytic “provided that grasp of its meaning alone suffices for justified belief in its truth” (363). If we simply ‘subtract’ the epistemic subject from this characterization, the result is: **S** is metaphysically analytic ‘provided that its meaning alone suffices for its truth’—and that is precisely (MA). Third, even if Boghossian *et al.* themselves do not accept this characterization of his target in terms of (MA), it is still intuitively appealing for someone skeptical of analytic truth. For it does seem implausible that facts about a sentence’s meaning can, by themselves, ever suffice for the truth or falsity of that sentence: the meaning-facts about e.g. ‘The sky is blue’ certainly don’t suffice for its truth, and *prima facie* there does not appear to be any reason why we couldn’t generalize from this case and others like it. Thus, it would be interesting and useful to know whether or not there are any sentences that are analytic in the sense of (MA), regardless of whether Boghossian and/or his intellectual allies actually happen to accept (MA) as the type of analyticity they target.

2 When a sentence’s meaning suffices for its truth

I shall henceforth proceed as though Boghossian *et al.* claim that the meaning of a sentence alone never suffices for that sentence to be true; that is, there are no sentences metaphysically analytic in the sense of (MA). The evidence offered for this claim is the ‘truism’ quoted above: $\lceil \mathbf{S}$ is true iff for some **p**, **S** means that **p** and **p**. \rceil I grant that (the universal quantification of) this truism is true. However, I disagree with the moral Boghossian and others draw from its truth: I do not think its truth shows that no sentences are analytic in the sense of (MA). That is, the premise (the truism) does not guarantee the conclusion. Under certain circumstances, the surface structure of this truism is highly misleading—and such circumstances are the ones most relevant to debates concerning analyticity. Specifically, I will argue that for some **S** and some **p**, $\lceil \mathbf{S}$ means that **p** \rceil *does suffice* for $\lceil \mathbf{S}$ is true \rceil —in particular, when **S** expresses

a logical truth, which is an analytic sentence, if anything is: logical truths are true in virtue of the meanings of the logical constants. Quine allowed that, if there were analytic truths, then the logical truths would be the paradigm examples of such. Quine explicitly says that logical truths are not analytic in any sense of ‘analytic’ that would give comfort to logical empiricist programs (Quine, 1960, p.65).²

Suppose for the sake of argument that something’s being H_2O is (necessary and) sufficient for it to be water. We might formalize this as

(1) x is water iff x is H_2O

where the biconditional can be something stronger than the material biconditional; it can be however strong it needs to be to meet your favored account of necessary and sufficient conditions.³ Note that the universal quantification of (1) is true exactly when the universal quantification of

(2) x is water iff [x is H_2O and (If grass is white, then grass is white)]

is true.⁴ (Any other logical truth of the language in which (1) and (2) are stated could be substituted in place of ‘If grass is white, then grass is white’.)

Now, if one only looked at the surface grammar of (2), then one might be tempted to conclude that something’s being H_2O does not suffice for that thing to be water, since there appears to be a second condition over and above being H_2O , expressed by ‘If grass is white, then grass is white’. However, that conclusion is absurd: something’s being H_2O *does* suffice for it to be water, and the truth of (2) makes no difference to that fact. Although the right-hand side of the biconditional in (2) is a conjunction, and thus it superficially appears that

²Quine does allow, in both *Word and Object* and *Roots of Reference*, that there are senses in which a sentence can be analytic. However, Quine holds that these senses cannot do the heavy epistemological lifting Carnap needs; more importantly, these Quinean senses are very far from (MA).

³For example, the argument that follows would go through if we use (1') $\Box(x \text{ is water} \equiv x \text{ is } H_2O)$, where ‘ \equiv ’ is the material biconditional, even with a modal logic as weak as *K*.

⁴The relevance logician denies that (1) entails (2), but this difference between relevance and classical logic will not matter for the argument against Boghossian.

there are two conditions that must be met for something to be water, nonetheless it does not follow that the single condition of being H_2O does not suffice for being water.

The problem with Boghossian's argument against sentences analytic in the sense of (MA) is that his truism is analogous to (2). When a logical truth is substituted for \mathbf{p} in his schema, that instance of the truism will have almost⁵ exactly the same form as (2). Boghossian's misinterpretation of his truism is understandable, because usually one conjunct alone on the right-hand side of the truism would not suffice for the left-hand side to be true: the meaning-facts about 'Grass is green' certainly do not suffice for that sentence to be true. However, when \mathbf{p} is a logical truth, we do *not* need both conjuncts. For the sake of concreteness, consider the following example, which is an instantiation of Boghossian's schematic truism quoted in the first paragraph:

(3) S_0 is true iff [(S_0 means that if grass is white, then grass is white) and (If grass is white, then grass is white)].

This has the same form as an instantiation of (2). (Again, assume the biconditional is strong enough to meet your preferred account of necessary and sufficient conditions.) If (3) is true, then

(4) S_0 is true iff (S_0 means that if grass is white, then grass is white)

must be true. Thus, in the usual sense of 'sufficient condition,' we have a case in which (*contra* Boghossian *et al.*) an instance of ' \mathbf{S} means that \mathbf{p} ' is sufficient for the corresponding instance of ' \mathbf{S} is true'. To say otherwise, we would have to give up either the logic generating this entailment from (3) to (4), or the usual understanding of sufficient conditions.

However, one could object that neither such a logic nor our standard view of sufficient conditions is sacrosanct. Let us consider the first horn first: many philosophers are quite

⁵Obviously, there are no propositional or sentential variables in (2), but this difference is immaterial for the point at issue.

willing to abandon classical logic in a wide variety of circumstances, so adopting one of the many non-standard logics to deal with this case is a *prima facie* appealing strategy. To pursue this strategy, we would need a logic that denies that (4) follows from (3) (and (1) from (2)). However, there are *no* serious logics that deny

$$p \text{ iff } (q \text{ and } \top)$$

(where \top is an arbitrary logical truth) implies

$$p \text{ iff } q,$$

regardless of how the conditional is understood. (Relevant logics reject the converse implication only.) What counts as a logical truth (i.e., the admissible substitutions for \top above) will of course vary from one logic to another, but no matter which logic is chosen, the above implication will hold. Thus, no matter what (serious) logic we use, we can find an example that disproves Boghossian's general claim, provided that the language contains at least one logical truth.⁶

Suppose now the objector grasps the other horn of the dilemma, and suggests that we should revise our usual way of thinking about sufficient conditions. Specifically, the objector is willing to admit that (for example) x 's being H_2O is not, strictly speaking, a sufficient condition for x to be water; rather, *all* the logical truths of the language *plus* x being H_2O suffice for x to be water. That is, this objector would say: 'Previously, I thought that $\lceil \mathbf{S}$ means that $\mathbf{p} \lrcorner$ and \mathbf{p} alone were jointly sufficient for $\lceil \mathbf{S}$ is true \lrcorner . However, in light of present considerations, now I see that many more conditions must be added to arrive at the genuine sufficient conditions, viz., all the logical truths of the language in which the truism is stated, one of which will be \mathbf{p} , if \mathbf{p} is a logical truth.' In other words, instead of (as I have suggested) dropping 'If grass is white, then grass is white' in (2) as part of the sufficient condition for something to be water, this objection instead suggests *adding in* all the logical truths to

⁶Many logics that allow truth-value gaps have no logical truths. Perhaps the best strategy for someone who wished to maintain Boghossian's position in light of my argument is to claim that there are no logical truths, and defend a logic in which that claim holds.

arrive at the genuine sufficient condition.⁷

One is of course free to propose a redefinition of ‘sufficient condition’ if one wishes. However, the redefinition just suggested appears *ad hoc* (in the absence of independent motivation), and brings certain further undesirable consequences in its wake. First, it is seriously at variance with the current customary understanding of sufficient conditions, as illustrated above with (1) and (2): we do think something’s being H₂O alone suffices for that thing’s being water. Second, it forces the person who adopts this definition to ‘choose a logic’ (so to speak), in the following sense. Suppose someone, in the spirit of this objection, makes the following claim: ‘Something’s being H₂O, plus all the logical truths of intuitionist logic, suffice for that thing to be water.’ Whether this sufficiency claim is true depends on whether Excluded Middle is a genuine logical truth or not—a matter of dispute between the classical and intuitionistic logicians. But we should not require a determinate logic to be in place before we can determine whether being H₂O is a sufficient condition for being water. It is far preferable to be able to hold that one condition suffices for another, without being forced to take a stand on intuitionism, paraconsistency, or any of the other ongoing philosophical disputes about logic. In sum, if the objector is right, we have no knowledge of *any* sufficient conditions; but this is too dear a price to pay for maintaining the thesis that there is no sentence whose meaning suffices for its truth.⁸

⁷Such an objector might initially think that the fact that (classically) every sentence *presupposes* every logical truth is evidence for this redefinition of ‘sufficient condition’. But that fact can only show at most that every logical truth is a *necessary* condition for something’s being water. The question, as I have framed it, is about whether meaning-facts ever *suffice* for a sentence’s truth.

⁸My argument in this paper bears some resemblance to Gillian Russell’s recent defense of analyticity (Russell, 2008). But whereas she introduces and deploys a sophisticated technical apparatus in the philosophy of language, I hope to have shown here that we can reach a similar destination using only the familiar concepts of logical truth and sufficient conditions. However, my conclusion is also more limited than hers: Russell argues that there are genuine analytic sentences other than the logical truths, such as ‘I am here now’.

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