**VERIFICATIONISM** | Lent 2019 | Maarten Steenhagen (ms2416@cam.ac.uk)
http://msteenhagen.github.io/teaching/2019ver/

Lecture 4: **The tribunal of the senses**

W.V.O. Quine (1951) 'Two Dogmas of Empiricism', *The Philosophical Review* 60 (1951): 20-43. (Reprinted in Quine, *From a Logical Point of View*)

> Modern empiricism has been conditioned in large part by two dogmas. One is a belief in some fundamental cleavage between truths which are *analytic*, or grounded in meanings independently of matters of fact, and truths which are *synthetic*, or grounded in fact. The other dogma is *reductionism*: the belief that each meaningful statement is equivalent to some logical construct upon terms which refer to immediate experience. Both dogmas, I shall argue, are ill-founded. One effect of abandoning them is, as we shall see, a blurring of the supposed boundary between speculative metaphysics and natural science. Another effect is a shift toward pragmatism.

## Argument against the verificationist

What about the second dogma? Quine calls this the dogma of reductionism: "the belief that every meaningful statement is equivalent to some logical construct upon terms which refer to immediate experience". As a theory of meaning this tells us that, apart from a special class of statements that are true regardless of what observations we make, all statements are meaningful only because their truth can be confirmed or disconfirmed in experience.

> As urged in §1, we can as well pass over the question of meanings as entities and move straight to sameness of meaning, or synonymy. Then what the verification theory says is that statements are synonymous if and only if they are alike in point of method of empirical confirmation or infirmation.

So doesn't the verification theory have the resources to offer an account of synonymy? Statements $S_1$ and $S_2$ are synonymous if and only if they have the same methods of verification, i.e. if exactly the same observations would confirm or disconfirm the statement. So if the verification theory of meaning is clear and well-founded, then we can offer an account of synonymy, and hence analyticity. Quine accepts the conditional. But he rejects the antecedent.

Recall, at the heart of the verification theory of meaning (both in its strong and in its weak form) is the observation sentence. It is crucial that the truth of these observation sentences does not depend on the truth of any other sentences or background theories. An observation sentence is immediately confirmable: you can see immediately whether the thing you're pointing to is red or not, and so see immediately whether the sentence "This is red" is true or not. Quine argues that this is something the verificationist must assume.

But this assumption boils down to the first dogma. The verificationist assumes that for some special class of sentences, truth turns exclusively on a 'factual component' (i.e. some experience or observable fact) and not on any 'linguistic component' (i.e. some facts about meanings). As the experiential bedrock, the observation sentence can be confirmed independent of theory or hypothesis. Similarly, the verificationist will accept that there is a special class of sentences that are true exclusively in virtue of their linguistic component. These are the truths of logic. As the logical bedrock, the truths of logic allow us to find between sentences connections that do not depend on experience or observation. The vast majority of meaningful sentences and hypotheses, of course, will have a bit of both: their truth turns both on observable fact and on the meanings of the terms.

> The two dogmas are, indeed, at root identical. We lately reflected that in general the truth of statements does obviously depend both upon language and upon extralinguistic fact; and we noted that this obvious circumstance carries in its train, not logically but all too naturally, a feeling that the truth of a statement is somehow analyzable into a linguistic component and a factual component. The factual component must, if we are empiricists, boil down to a range of confirmatory experiences. In the extreme case where the linguistic component is all that matters, a true statement is analytic. But I hope we are now impressed with how stubbornly the distinction between analytic and synthetic has resisted any straightforward drawing.

## Defending a dogma?

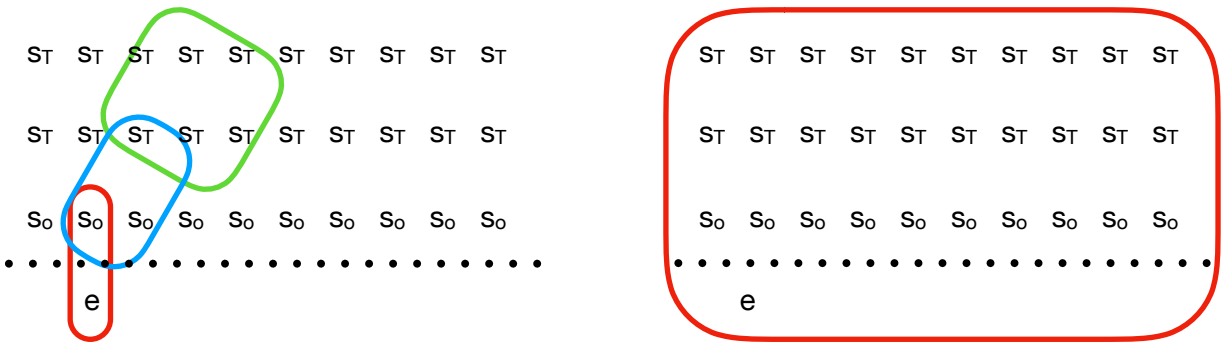
What do we lose when we lose analyticity? In their paper 'In Defence of a Dogma' Strawson and Grice argue that Quine's argument, when sound, implies that there is no such thing as linguistic meaning. That is absurd, they think. But compare this with the colour case. Perhaps there is no such thing as Colour, if this means anything over and above the overall visual appearance of an object and the way that appearance visually resembles and contrasts with other objects. Perhaps the facts about which objects match others is all there is to an item's being coloured. Similarly, one could think of linguistic meaning as nothing over and above the legitimate patterns of translation between sentences or regularities in language use. One does not need the dogmas for a theory of meaning.

### Semantic holism

Does this mean we should give up empiricism? No. Quine suggests that the empiricist need only revise their theory of meaning.

What theory of meaning do we get when we give up the dogma(s)? The key to this lies in Quine's statement that "our statements about the external world face the tribunal of sense experience not individually but only as a corporate body" (p. 41). This marks a move away from semantic *atomism* toward semantic *holism*. (Quine says that he takes this insight from Rudolf Carnap and Pierre Duhem. But he thinks that at least Carnap doesn't take it far enough.)

Contrast the following two diagrams:




The first diagram represents how the verificationist conceives of confirming or disconfirming hypotheses: the basic moment of confirmation is at the level of the observation sentence ($S_o$), which can be confirmed or disconfirmed in experience (e) independently of any other sentence or hypothesis. This presupposes that some statements have a theory-independent meaning. Indeed, according to the logical positivist these meanings creep upwards, grounding everything we can say meaningfully about the world.

Quine thinks this is false. The second diagram represents Quine's semantic holism: the basic moment of confirmation is of the entire theory: "the unit of empirical significance is the whole of science" (p. 42).

## Speculative metaphysics and science

If semantic holism is true, then the meaning of every sentence is tied up with the meaning of every other sentence, at least to some degree. (Compare this with Frege's 'context principle'.)

If you are faced with a mismatch between the things you say about the world and your experience, there is no determinate answer to the question "What did I get wrong?". You can make your theory fit with experience by revising any number of statements you have made about the world. Moreover, our theory is under-determined by observation (think of the problem of induction: our theories go beyond experience). We have no reason to think that there is a single theory that fits with experience.

This implies that we cannot clearly distinguish between scientific and metaphysical statements: the claim that there are mammals and the claim that there are universals can both turn out to be true, relative to an overall theory. Quine illustrates this with a question about classes.

> **Ontological questions, under this view, are on a par with questions of natural science.[20] Consider the question whether to countenance classes as entities. This, as I have argued elsewhere,[21] is the question whether to quantify with respect to variables which take classes as values. Now Carnap [6] has maintained that this is a question not of matters of fact but of choosing a convenient language form, a convenient conceptual scheme or framework for science. With this I agree, but only on the proviso that the same be conceded regarding scientific hypotheses generally.**

## Logical truths

Recall, *logical truths* are those that have their truth guaranteed by the logical form of the statement itself. So far we have assumed that these are always true. But if we assume a semantic holism, we should accept that even the most basic logical principles are open for revision in light of experience.

Quine mentions the example of the logical law of the excluded middle, that for any proposition either it or its negation is true (P or not-P). The sentence 'The meeting is cancelled or not' is considered a logical truth because of this logical law. But, Quine observes, some have proposed to consider this principle to be disconfirmed by experience when doing quantum physical experiments (i.e. quantum indeterminacy).

## Shift towards pragmatism

How do we decide what revisions to make in light of 'recalcitrant experience'? Quine (again following Carnap) says that that the principle here must be pragmatic: is the resulting theory more or less expedient, fruitful, conducive to the aim for which it is intended? This is similar to William James's characterisation of a pragmatist theory of meaning and epistemology in 'The Pragmatic Method' (1904):

> Beliefs, in short, are really rules for action; and the whole function of thinking is but one step in the production of habits of action. If there were any part of a thought that made no difference in the thought's practical consequences, then that part would be no proper element of the thought's significance. Thus the same thought may be clad in different words; but if the different words suggest no different conduct, they are but outer accretions, and have no part in the thought's meaning.