

Radical Interpretation, Part II: Philosophical Logic.

Lecture I, *Quine's Radical Translation*, 6th November.

Christopher J. Masterman (cm789@cam.ac.uk, christophermasterman.com)

1. Introduction.

1.1. To go about *radical interpretation* is to draw conclusions about the meanings of utterances in some completely unknown language. Radical interpretation is most closely associated with the work of Donald Davidson. A similar, earlier phenomenon is that of *radical translation*—to draw conclusions about which sentences of a completely unknown language pair with sentences of another language.

1.2. Radical translation is most closely associated with Quine. To best understand *why* Quine is interested in radical translation and *what conclusions* he draws from thinking about radical translation, we need to first understand the background empiricist commitments of Quine. The first key commitment is that semantic facts arise, or are grounded in, non-semantic facts. More particular, Quine accepts:

Semantic Behaviourism (SB): “There are no meanings, nor likenesses nor distinctions of meaning, beyond what are implicit in people’s dispositions to overt behaviour” (Quine, 1968: 187)

Now, Quine’s empiricism certainly entails that all our *knowledge* of meaning must ultimately be derived from experience, and perhaps the only relevant experiences concern people’s behaviour and their dispositions to behave. But it is important to note that (SB) is not an epistemological thesis, it is a *metaphysical* thesis.

1.3. A second important commitment is to the *sentence* as the most basic component of meaning. This can be taken to follow from Quine’s empiricism. If we were simply to observe the production of language, we would see that it is sentences, not the individual words, that have primary significance. From a *neutral* point of view, the word ‘arm’ alone has no more significance in ‘I hurt my arm’ than inside the word ‘charm’. This makes it clear why Quine beings translation by pairing *sentences* of that language up with *sentences* of the translator’s language—coming up with ‘translation manuals’.

1.4. These background commitments should make clear *why* Quine is interested in radical translation. The *radical* translator is attempting to decipher a completely unknown language and this means that there can be no appeal to dictionaries, already existing partial translations, or historical facts about the origin of the language. All that is available to the translator is the overt linguistic behaviour—the utterances, scribbling, and so on. For Quine, the consequences we draw from radical translation tell us something important about meaning generally. Focusing on *radical* translation allows us to ask questions about language generally, divorced from the usual familiarity of our own language.

1.5. One final caveat. Both radical interpretation and translation are presented so that they appear to be raising epistemological issues: how can we *know* that a certain noise or sign means what it means? But we should view the epistemological framing as rhetorical. Reflecting on radical interpretation and translation is supposed to make clear how various *non-semantic facts* fit together with *semantic facts*, see (Heal, 2017).

2. Quine on Radical Translation

2.1. Let’s now look in detail at Quine’s discussion of radical translation in (Quine, 1960: Chp. 2). We are to imagine a linguist encountering a completely unknown language for the first time. All that such a linguist has access to is observations of how speakers of this language respond when prompted by facts in their environment.

2.2. How should the linguist even begin their attempt to radical translate? Quine suggests that the first utterances to be translated are ‘... ones keyed to present events that are conspicuous to the linguist and his informant’. For instance, were a white rabbit to scurry by and the utterance ‘Gavagai’ were immediately elicited, the linguist should note down ‘Lo, white rabbit’ or ‘There is a white rabbit’ as a tentative translation. (Note that here ‘Gavagai’ is a *full sentence*, not an individual word.)

2.3. Crucially, the linguist’s translation of ‘Gavagai’ as ‘Lo, white rabbit’ is *tentative*. As Quine points out, the initial tentative translation will fail to be accurate, if ‘Gavagai’ is best translated as ‘Lo, white thing’ or ‘Lo, animal’. Crucially, ‘Animal’, ‘White’, and ‘Rabbit’ could all be elicited from the initial appearance of a white rabbit. The translation of ‘Gavagai’ as ‘Lo, white rabbit’ must be understood as a *hypothesis*. The translator can test his hypothesis by trying different combinations of conspicuous events and queries of ‘Gavagai’. Assent or dissent on the part of the informant will guide the development of the initial hypothesis.

2.4. How could the radical translator even confidently identify assent or dissent? Perhaps the informant seems to use ‘Evet’ and ‘Yok’ as ‘Yes’ and ‘No’, but the translator does not know which is which. The informant may say ‘Evet’ in response to ‘Gavagai?’ and in the presence of a white rabbit. Perhaps even the informant says ‘Evet’ in response to the translator repeating ‘Gavagai?’ after the informant says ‘Gavagai’. These methods will be inconclusive. (For instance, the question remains whether the usual ways in which we ask questions is sufficiently similar to the informants practice for them to understand that ‘Gavagai?’ is even a question.) What’s important is that they will inform the hypotheses the radical translator forms.

3. What Can and Can’t be Learned from Radical Translation

3.1. We can in principle come to assign a particular kind of meaning to ‘Gavagai’. This is what Quine calls the *stimulus meaning*. Quine defines the affirmative stimulus meaning of some sentence as:

We may begin by defining the *affirmative stimulus meaning* of a sentence such as ‘Gavagai’, for a given speaker, as the class of all the stimulations (hence evolving ocular irradiation patterns between properly timed blindfoldings) that would prompt his assent. (Quine, 1960: 29)

More concretely, some stimulus σ is included in the affirmative stimulus meaning of a sentence iff there some other stimulus σ' (e.g., the stimulus resulting from being blindfolded) and when presented with σ' and *then* σ (e.g., the stimulus resulting from seeing a white rabbit) the informant goes from dissent to assent. Stimulus doesn’t have to be limited to sight. We define *negative* stimulus meaning in much the same way.

3.2. It is worth noting how different stimulus meaning is from our ordinary notion of meaning. The stimulus meaning tells you only the totality of individual stimuli that elicit assent to a particular sentence of the informant’s language. The stimulus meaning alone doesn’t tell you anything rich like the fact that ‘Gavagai’ is about rabbits, or not about elephants. But we can in principle work out a determinate stimulus meaning for any given sentence of the informant’s language. Given that we started from scratch, that’s something.

3.3. What about individual words? So far, we have only been concerned with sentences—the sort of thing you assent to and, for Quine, the basic component of language. Consider the *word* ‘gavagai’. How might the radical translator go about assigning a meaning to *that*? We might think that ‘gavagai’ picks out a rabbit if it is a singular term or picks out rabbits if it is a predicate. (Note that it may very well not have anything to do with rabbits if ‘Gavagai’ is some idiomatic sentence.) But Quine notes that nothing the translator can observe fixes the meaning of the word ‘gavagai’. The same response is elicited from the informant if ‘gavagai’ means:

- (i) An undetached part of a rabbit

- (ii) An instantiation of rabbithood
- (iii) A stage in the history of a rabbit
- (iv) A region of space a mile to the left of a region a mile to the right of a region occupied by a rabbit.

Note that Quine does not think that the sentence 'Gavagai' is indeterminate—it can be given a precise stimulus meaning. Rather, it is the word 'gavagai' that is indeterminate. The indeterminacy of the word 'gavagai' is important and tied to Quine's thesis of the inscrutability of reference. We'll look at this in detail next week, as well as another conclusion Quine's draws from radical translation: the indeterminacy of translation.

References

- Heal, Jane (2017). Radical Interpretation. In: *A Companion to the Philosophy of Language*. Ed. by Bob Hale, Crispin Wright, and Alexander Miller. Wiley, 299–323.
- Quine, W. V. O. (1960). *Word and Object*. Cambridge, MA, USA: MIT Press.
- Quine, W. V. O. (1968). Ontological Relativity. *Journal of Philosophy* 65, 185–212.