

## Radical Interpretation, Part II: Philosophical Logic.

Lecture II, *Quine's Indeterminacy of Translation*, 13th November.

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Recall that *radical translation* involved a linguist attempt to translate an unknown language to his own language in the case where the linguist only has the ability to observe overt behaviour. This is relevant, since Quine is interested in what can be established about language, given the strict empiricist assumption of Semantic Behaviourism—the view that meaning is determined (if at all) by dispositions to overt behaviour. Quine show that the linguist can make some progress. They can in principle identify the affirmative stimulus meaning of any sentence  $S$  of the unknown language—the totality of stimulus resulting in *assent* to the  $S$ .

### 1. *Indeterminacy of Translation*

1.1 A translation manual  $M$  for the unknown language  $\mathcal{L}_U$  from the known language  $\mathcal{L}_K$  is a function which takes expressions of  $\mathcal{L}_U$  and maps it onto expressions of the  $\mathcal{L}_K$ . Of course, most languages have an infinite number of possible expressions, so such an  $M$  will most likely involve breaking expressions of  $\mathcal{L}_U$  into their component parts and mapping them to component parts of  $\mathcal{L}_K$ , translating expressions recursively.

1.2. Quine draws a significant conclusion from his discussion of radical translation (Quine, 1960: 24)

**The Indeterminacy of Translation:** Between any two languages, for instance  $\mathcal{L}_U$  and  $\mathcal{L}_K$ , there are many translation manuals  $M_1, M_2, \dots$  such that all of  $M_1, M_2, \dots$  are adequate but provide different translations.

What do we mean by *adequate*? For Quine, a manual is adequate if for any sentence  $S$  of one language and sentence  $S'$  of the other,  $S$  is mapped to  $S'$  by the manual iff  $S$  and  $S'$  are *semantically equivalent*. Two sentences are semantically equivalent just in case their use is the same, i.e., if they have identical stimulus meanings. Two manuals provide different translations if they pair up non-synonymous expressions.

1.3. If there are two manuals  $M_1$  and  $M_2$  which are both adequate in the above sense and which deliver different translations of some sentence of  $\mathcal{L}_U$ , then that means that facts available to the linguist in radical translation under-determine translation. Importantly, for Quine, the facts available to the linguist in radical translation are precisely all of the relevant physical facts. Thus, for Quine, there would be an indeterminacy of translation *generally* and not just in cases where we focus on some particular set of non-semantic facts.

### 2. *Arguments for the Indeterminacy of Translation*

2.1. There are two key arguments for the indeterminacy of translation (for discussion of these, see (Hookway, 1988: Chp. 8)). The first appeals to indeterminacy in the reference or extension of sub-sentential expressions like 'gavagai'. (Recall that 'gavagai' is a *word* and 'Gavagai' is a sentence.) All the available evidence does not allow our radical linguist to distinguish between two hypotheses (assuming that 'gavagai' is a predicate):

- (1) The extension of 'gavagai' is all and only the rabbits.
- (2) The extension of 'gavagai' is all and only the rabbit-stages.

The thought here is that (1) and (2) holding true results in the same overt behaviour from the informant and thus results in the same stimulus meanings. This connects up with the indeterminacy of translation straightforwardly. One adequate manual  $M_1$  can translate 'gavagai' according to (1) and another  $M_2$  can translate 'gavagai' according to (2). Both  $M_1$  and  $M_2$  will (assuming they agree on enough else) be adequate. Yet, 'gavagai' in the sense of (1) and 'gavagai' in the sense of (2) are non-synonymous, e.g., sentences involving one and not the other diverge in their ontological commitments at the very least.

2.2. Quine thought that a much deeper, second argument, for indeterminacy of translation follows from his holism, see (Quine, 1970). The relevant observation is that stimulus meanings do not capture semantic facts about *S in isolation*. Rather assent or dissent to *S* depends on other beliefs. A translation manual fundamentally offers a systematic description of how the informant is overall disposed to behave in certain ways. But since those dispositions to behave are best understood holistically, there can consequently be different systematic descriptions which fit all the facts.

### 3. Consequences of Indeterminacy

3.1. The conclusion Quine draws from the indeterminacy of translation is that there simply is no meaning to sentences if meaning is taken to be some intensional entity like a proposition. Different equally adequate translation manuals assign non-synonymous translations, and so the non-semantic facts under-determine the proposition expressed. Of course, it doesn't follow from this conclusion alone that there is no such meaning to sentences. We can consistently think instead that such intensionality is 'autonomous', floating free from the purely physical. But for Quine, the facts available to the radical linguist are *all* the relevant facts.

3.2. Does Quine leave out any further relevant physical facts? For instance:

.... a community is more likely to have terms for rabbits than for ... stages in their histories. Hence, the first of our putative translations for 'gavagai' looks much more promising than the others. (Hookway, 1988: 135)

Now, Quine does indeed accept that we should prefer a translation in terms of rabbits than in terms of rabbit-stages. However, he's clear that we shouldn't think of such preferences as anything more than pragmatic. A separate worry is whether it is particularly clear that rabbits versus rabbit-stages is more likely. We talk about rabbits. But is it just conceptually chauvinistic to downplay the possible conceptual variety that deviates from our own? For instance, the Andean Aymara see the past as *ahead* of them.<sup>1</sup>

3.3. Quine's discussion of radical *translation* and Davidson's discussion of radical *interpretation* have much in common. With both, we are interested in whether some semantic facts can be established from non-semantic facts alone. However, it's important to distinguish radical translation from interpretation. Radical translation concerns connections between languages: it is fundamentally concerned with pairing up sentences of a known language with an unknown language *via* translation manuals. Radical interpretation, however, concerns connections between an unknown language and *the world*—it is an attempt to develop a theory which tells us what the unknown language *means*. That is, it attempts to assign *reference* and *extension* to sub-sentential parts of an unknown language. Both Davidson and Quine argue for forms of semantic indeterminacy; but the significance of their claims, and the arguments for them, differ.

## References

- Hookway, Christopher (1988). *Quine: Language, Experience, and Reality*. Polity Press.  
Quine, W. V. O. (1960). *Word and Object*. Cambridge, MA, USA: MIT Press.  
Quine, W. V. O. (1970). On the Reasons for Indeterminacy of Translation. *Journal of Philosophy* 67, 178–183.

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<sup>1</sup><https://phys.org/news/2006-06-future.html>