# Philosophy of Language // Spring 2020

## Handout 11

## Indeterminacy of translation II: Quine

**Theoretical under-determination.** Quine begins by saying that the point of his indeterminacy thesis was not really in radical translation. The point was 'broader and deeper'. To explain this, he turns to the relation between theory and evidence. A physical theory theory $T$ is underdetermined by past evidence at time $t_0$. That is: there could be a theory $T'$ that is confirmed to the same degree as $T$ by past observations, yet delivers different predictions about the future. Of course when a future time $t_1$ comes, one of the theories (say $T'$) may go overboard. But then another theory may arise that is confirmed just like $T$, but is incompatible in terms of predictions about the future. 178 179

The same sort of argument can be deployed for under-determination by past *and* future evidence, and under-determination by all possible evidence. What does the latter claim mean? We are supposed to imagine a complete, global theory $T$ that entails all true observation sentences. Such a theory should not be entailed by some more global theory, however. Then, Quine claims, there is a theory $T'$ which is empirically equivalent to $T$: it also entails all true observation sentences. Yet $T$ and $T'$ may be distinct. 179

The big problem is to make sense of their distinctness. We cannot simply say that $T$ and $T'$ have different 'meanings', or express different 'propositions': if the totality of observation sentences matches in both theories, it is not clear how Quine has room to insist on that meaning difference. Next, we might say that the two theories are formulated with the aid of two incompatible mathematical theories. I do not wish to go into the details here. Suffice it to say that obviously Quine does not have this argument in mind. Instead, we may simply think that $T$ and $T'$ cannot be translated one into another.

If this is the case, then the argument can be formulated thus:

(i) Equate observation sentences of $L_1$ with observation sentences of $L_2$ through inductive equation of stimulus meanings.
(ii) To build theoretical sentences we must utilise analytical hypotheses about semantic structure.
(iii) The justification of analytical hypotheses comes from matching up relevant observation sentences.
(iv) So far as the truth of a physical theory is under-determined by evidence, the translation of the foreigner's physical theory is under-determined by translation of his observation sentences.
(v) Therefore, translation of physical theories is indeterminate—to the extent that physical theories are under-determined by all possible observations.

However, indeterminacy of translation is additional to the under-determination of theories by evidence. This is so, since, although translation of physical theories is under-determined by evidence, there must still be a fact of the matter about physics.

Therefore, once we have made a choice of physical theory, the choice of the translation manual is still open. The premisses (i) and (ii) seem sensible. But what about the premiss (iii)? Read one way, it may simply be saying that the range of analytical hypotheses is not fixed by stimulus meaning. There may be mutually inconsistent hypotheses, each of them being consistent with stimulus meaning. But then we already have the desired indeterminacy, and there is no novel argument here.

Read another way, the inference is valid so far as we assume that the only facts relevant to translation are translations of observation sentences and that those translations are not determined at the level of stimulus meaning.

**Arguments from above and from below.** We have, therefore, two ways of arguing for indeterminacy. We can begin at level of sentences with the proxy functions and the premisses of behaviourism. Or we can begin with 'gavagai', with inscrutability of terms, and the indeterminacy of ontology. [to be completed] 183

YSB