Part 1b, Paper 2 Logic | Michaelmas 2016

Theories of Meaning

Lecture 3: Compositional Semantics

1. The principle of compositionality The meaning of a complex expression is determined by its structure and the meanings of its constituents.

2. Formal languages and compositionality In formal languages, the principle of compositionality plays a central role in getting semantics to flow from syntax. We find a well-understood syntax and no lexical or structural ambiguity. This is *by design*.

3. Is the semantics of natural language compositional? This may seem plausible. But perhaps it seems plausible for the wrong reason: 'building-block theory' of natural language. If that theory is false, then why think natural language has a compositional semantics?

4. What is a theory of meaning? Call an account of the meaning of the sentences in the language a *theory of meaning* for that language. It is "something knowledge of which would suffice for interpreting utterances of speakers of the language to which it applies". Davidson thinks of this as an *empirical* theory.

5. Davidson's learnability argument What form should a theory of meaning for natural language take? Natural language is learnable only if its semantics is compositional. Hence, any theory of meaning for a natural language must be a compositional ('constructive') theory of meaning.

6. Violating learnability Example of a semantics for quotation. According to Tarski, 'Dog', ''Dog'', and''Dog"', are three semantical primitives.

7. Davidson's programme Davidson (in 'Truth and Meaning') suggests that, at least for natural languages, the only adequate theory of meaning takes the form of a Tarskian truth definition for a language ('S' is true-in-L iff S). How does this respect compositionality?