

### Objections to Quine: Evans, Chomsky

**EVANS' OBJECTION.** Suppose we endorse the following:

*Compositionality constraint.* A theorem fixing the truth-conditions of  $S$  should be derivable from the specification of semantic values of its parts in such a way that the speaker could move to understanding  $S$  on the basis of exposure to those parts.

The theorist of meaning must assign semantic values to sub-sentential parts in such a way that the observed assent conditions of whole sentences could be accommodated, and in such a way that the assignment is consistent with the occurrences of those parts in all the contexts.

For example, we may hold as axioms of our theory  $T_1$  of meaning the following sentences governing 'tavşan':

$$(\forall x)(x \text{ satisfies 'tavşan' iff } x \text{ is a rabbit}). \quad (17-1)$$

and 'beyaz':

$$(\forall x)(x \text{ satisfies 'beyaz' iff } x \text{ is white}). \quad (17-2)$$

A competing theory  $T_2$  would have a different axiom:

$$(\forall x)(x \text{ satisfies 'tavşan' iff } x \text{ is an undetached part of rabbit}). \quad (17-3)$$

On the basis of  $T_1$  we can have:

$$'a \text{ is a beyaz tavşan}' \text{ is true iff } a \text{ is white rabbit}. \quad (17-4)$$

On the basis of  $T_2$  we can have:

$$'a \text{ is a beyaz tavşan}' \text{ is true iff } a \text{ is a white undetached part of rabbit}. \quad (17-5)$$

But then we cannot account for the situation of black-and-white rabbit. So perhaps we should switch to  $T_3$  with a different axiom for 'beyaz':

$$(\forall x)(x \text{ satisfies 'beyaz' iff } x \text{ is a part of a white animal}). \quad (17-6)$$

Then we get:

$$'a \text{ is a beyaz tavşan}' \text{ is true iff } a \text{ is a white part of an animal}. \quad (17-7)$$

But  $T_3$  will fail when the natives talk about white doors or houses. And so forth. Hence, the theory of meaning endorsing the Compositionality constraint must remain determined.

**OUTLINE OF CHOMSKY'S CRITIQUE.** Chomsky sees Quine's claim as developed within an empiricist (Humean) framework. The mind learns a language (mother tongue or foreign language) by conditioning. It works outside of any theory about the language learned. So a radical translator, for example, is not allowed to make substantive assumptions about the working of the native language. But this framework is not acceptable in the study of language.

**ANALYTICAL HYPOTHESES.** Chomsky questions the assumptions behind Quine's description of language acquisition and, consequently, behind the thesis of the indeterminacy of translation. First of all, he claims that it is an *empirical* matter which concepts are in fact used in the language. Ordinary concepts such as 'house' or 'knife' can mean different things to an average child—but this is an empirical matter to be investigated by normal methods of psychology. Another interesting case is 'similarity'. This is a concept at the centre of radical translation: the translator must be able to tell which similar stimuli generate which similar responses. But which criteria of similarity are adopted is another empirical matter.

Secondly, it is unclear why linguists, unlike physicists, are not allowed a unified framework in which to conduct their investigation. Such a framework would provide for a unified set of analytical hypotheses, without the need to adapt them to particular speakers and particular languages. But, according to Quine, there can be no such unified set: each language, and each manual, would require its own analytical hypotheses.

Why Chomsky questions this assumption can be seen from the comments on language learning. In Quine's picture, I learn a language by being exposed to certain stimuli and responses (i.e. utterances). One difficulty is to account for the ability to formulate infinitely many sentences on the basis of a few sentences. Instead, we should think of language acquisition as a process where I grasp syntactic forms common to the sentences in the language, and armed with these rules, am able to formulate indefinitely many sentences.

Behaviourism, in general, rests on a confusion. Use of sentences can be taken as evidence about their meaning. It cannot constitute meaning itself. When, e.g., I observe a speaker uttering a sentence *S*, the circumstances of his utterance offer clues to what he means by *S*. Yet these circumstances cannot be identified with the speaker's meaning.

**INDETERMINACY AND UNDER-DETERMINATION.** If, therefore, we reject the idea that language learning and theorising cannot be done within a framework of a single theory, then a linguist is in the same position as a physicist. And physical theories, Chomsky remarks, are often under-determined by evidence. That is, they make claims going beyond the available data—just like a radical translator does. But this is not an especially novel or puzzling claim.

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