Theories of meaning: The referential theory of meaning

Referential theory: expressions stand for things/objects in reality
- words function like labels, sentences mirror state-of-affairs
- N designate objects, V designate activities, A designate properties
- some strings are meaningful/well-formed

\[
\text{The cow ate grass} \quad \text{vs.} \quad \text{Grass cow the ate}
\]

Principle of compositionality
- have parts that are themselves meaningful (\textit{cow, grass})
- mean something in particular
- competent speakers handle it effortlessly

sentence: abstract unit constructed with syntactical rules
are realized in discourse through utterances

proposition: what is expressed by a declarative sentence

differences in meaning depend on the way they are perceived, even if they designate the same set of objects (Frege)

Problems with the referential theory of meaning

Rule formation constraints: labels in natural languages: used with certain regularity, therefore rules exist
Principle of compositionality leads to componential semantics
- attempts to capture meaning in semantic features

problems in defining meanings: cf. \textit{cow, grass, to eat}

- formulating rules ends in an infinite regress
- rules can never be fully explicit, therefore how can understanding exist?

The representation problem: What are the mental/causal mechanisms governing language use?
Hume: rule following consists in irreducible mental experience
"green" → processing of a qualitative mental state
Chomsky: \textit{I-language}, embodies our knowledge of language
- language faculty is a subsystem of mind/brain
- before first language acquisition, it is in an "initial state"
- initial state is determined by a \textbf{Universal Grammar} (UG)
Emergence of language and language use

In first language acquisition: a new state is attained
• initial state: not regulated by rules but by principles
  acquisition of syntax: setting of parameters
  acquisition of semantics: basis for lexicon is already present
• "a rich conceptual structure" (Chomsky)
  → in acquisition: labels are put to concepts
  • language and thought are "awakened in the mind"
  • follow a predetermined course

Problem: a linguistic rule cannot be "read-off" off the brain's mechanisms
Cf. The EU is in the northern hemisphere → has structure of a possible fact

Wittgenstein:
(1) wrong formulation: Humans have an understanding of the rule, therefore they use the word for the object accordingly
(2) correct formulation: Humans have an understanding of the rule because they use the word for the object accordingly

Structure of language vs. Structure of the world

Fundamental isomorphism ("theory of the common structure")
The structure of a proposition is isomorphic with the structure of a fact
• all languages derive from a pattern that is identified with logic
  • best example of a theory of common structure: early Wittgenstein
  Tractatus (1921): sign representing a fact is a Satzzeichen
e.g. a declarative sentence
• simple and complex symbols in a language
• simple: names, stand for objects

Der Name vertritt im Satz den Gegenstand (Tractatus, 3.22)
• name-object-link is arbitrary
• isomorphism: Satzzeichen must have the same number of constituents as the fact it represents
decomposing constituents of reality correlates with decomposing constituents in language
• therefore, atomic components of language are bound by laws of an underlying logical structure
  → laws of logic determine what can be the case
Theories of meaning: Extension and intension

*Reference (Frege): if two words are identical in the sense that they designate the same set of objects
(birthplace of Albert Einstein/city with the highest steeple in Germany)
• anything that is true of one must be true of the other
• extension of singular terms: the object
• intension: the content of a word, sum of features
• two words are extensionally equivalent if they refer to the same set of objects (Evening Star/Morning Star)
• two words are intensionally equivalent if they share the same features (speed/velocity)

Frege: every significant linguistic expression has both:

  sense (Sinn) and reference (Bedeutung)

• both are different kinds of semantic properties
• reference is compositional (complex reference is determined by partial references)