#### Introduction to Linguistics SEMANTICS

#### What is meaning?

Includes: synonymy, antonymy, ambiguity etc. Excludes: frequency, case form, inflectional paradigm, etc.

*The meaning of an expression is that to which it refers*: not so simple. Requires a highly articulated system for describing, generalizing, and predicting a wide range of specific semantic observations. The answer has to be a condensed form of such a fully developed theory.

### **Referential theory**

**Meaning as reference (extension)**: an expression has a meaning only if it refers to something, two expressions will have the same meaning (will be synonymous) if they refer to the same thing.

Frege's (1892) refutation of the referential theory:

The morning star is the evening star  $\neq$  The morning star is the morning star. Same referent (the planet Venus), different meanings.

Deictic expressions: *this book*: meaning potentially changes from situation to situation  $\rightarrow$  Identity of reference is neither a sufficient nor a necessary condition for identity of meaning.

Further problem: linguistic expressions that have no extension: *book* (may be the set of all books),*witch, this, few, although, not,* etc.)

#### Ideational theory

*Meaning as ideas*: an expression has a meaning if and only if it is associated with an idea (what is it? Mental pictures, images...), two expressions have the same meaning if they are associated with the same idea. The compositionality of meanings should be accounted for in terms of the compositionality of ideas.

Morning star/evening star problem solved: the referents are the same but the concepts speakers and listeners have of them may differ.

*Witch*-problem solved: no reference, but the idea exists There are still expressions with no mental images: *how, and...* 

#### <u>Meaning as use</u>

<u>Wittgenstein</u> (1953): "the meaning of a word is its use in the language." You do not have to regard meanings as entities that stand in some special relation to expressions. Emphasis not only the role of the expression within the language but

also the role of language in human life. The proper characterization of a linguistic expression must include an account of how it is used and what it is used for.  $\oplus$ : does not exclude any class of meaningful expressions: *for, if* have no referent, evoke no images or characteristic responses, but they do have a use. May be too broad, including non-semantic uses as well (social, practical, syntactic).  $\rightarrow$  This is more like pragmatics today, but semantics and pragmatics have the same "root". The two are two different approaches to meaning.

## Speech act theory: pragmatics

<u>Austin (1962)</u>: imperative, interrogative sentences, meaning identified with the speech act(s) (locutionary, illocutionary, perlocutionary acts) the sentence is used for.

Grice: emphasis on speakers' intentions = utterance meaning  $\rightarrow$  pragmatics

Pragmatics is not concerned with compositional meaning. *Shoot her!* Can be used for urging, advising , but it does not have multiple meanings in the same way as e.g. *Every girl kissed one boy*.

 $\rightarrow$  speech act ambiguity differs from ambiguity of meaning.

# Meaning and truth: semantics

To understand what a sentence means, we must specify its illocutionary force potential (pragmatics!) and its propositional content (semantics). It is the nature of statements to be true or false: to make a statement is to claim that it is true (without necessarily believing it). To understand a statement is to know what the world would be like if it were true.

Machinery from logic: predicate calculus: function-argument structure (*Peter arrived*.)

Adjective-noun constructions: set intersection (red ball)

**Set theory:** a number of direct applications in linguistics. Set: a number or collection of things or entities of any kind. Consists of elements/members.

**Relation**: a set of ordered pairs: pairs {} vs. ordered pairs <> (more intelligent than: order matters!)

# Propositional logic

Connectives/conjunctions: *and*, *or*, *therefore*, *because*, *if...then*, *as*, *since* Logical connectives: combine sentences in logically different ways, determine the logical consequences of the sentences related by them.

Propositional logic: not interested in the internal structure of sentences  $\rightarrow$ 

sentential/propositional variables from p onwards

One of the most important tasks of logic: to show what correct conclusions can be drawn from a set of premises/what conclusions preserve the truth of the premises.

Not all connectives are truth-functional! (*but*) Conjunction, disjunction, implication, equivalence, negation Truth tables

### Negation ~

Only on sentence-level, intonation, ambiguities disregarded.

## Conjunction &, ∧

Sentence-level, no collectivity, no temporality (conjunction is commutative), stimes similar to implication (*Run a mile every day and you will feel like a new man*), associativity

# **Disjunction** V

Discrepancies: inclusive vs. exclusive disjunction  $(p \lor q) \& \sim (p \& q)$ 

A lot more than truth-functional properties are involved in linguistic communication.(a set of communicative norms which aim at making the exchange of information by the participants in a speech situation as effective as possible, see

Grice later  $\rightarrow$  one should not say  $p \lor q$  if one can say p or  $p \And q$ , both being more definite)

## Implication $\rightarrow$

Even more different from its corresponding expressions in ordinary language : false only when antecedent is true and consequent false – more required in an ordinary conversation (cause and effect, not present in logic): *If Kennedy was a President then cabbage is a vegetable. If you eat your spinach, I'll give you \$10.* Is the sentence false if you don't eat your spinach, but I still give you the money?

# Equivalence ≡

Mary will pass the exam if her result on the written test is satisfactory. Mary will pass the exam if and only if her result on the written test is satisfactory. Difference bw sufficient and sufficient *and* necessary conditions! True when the simple sentences combined have the same truth value