

*Semantics 1:*  
*Lexical Semantics*

Ling400

# *What is semantics?*

- **Semantics** is the study of the linguistic meaning of morphemes, words, phrases, sentences.

# *Dictionary definitions*

- Defining the meaning of a word in terms of other words (of the same language) is circular and does not answer the following question: What is meaning?  
How do we learn meaning?

# *Two types of semantic theory*

- Referential theory
  - The meaning of an expression (e.g. word) is its referent (i.e. what it refers to).
- Representational theory
  - The meaning of an expression (e.g. word) is its image, concept, mental representation, or a bundle of semantic features, etc. (not directly linked to the outside world)

# *The semantics of proper names*

- The referential theory works best here.
- *Noam Chomsky* means



- *Seattle* means



*But sometimes, you have  
problems with this idea ...*

- *The Morning star* (Greek: *Phosphorous*) means



- *The evening star* (Greek: *Hesperus*) means



- *Phosphorous is Phosphorous.* [trivial]
- *Phosphorous is Hesperus.* [informative]

# *Frege's conclusion*

- We need to distinguish between **reference** (German: Bedeutung) and **sense** (German: Sinn) — something more abstract than reference.
- *The morning star* and *the evening star* have the same reference but have different senses.

# *Count (Common) Nouns*

- Let us assume that the meaning of a count noun is the collection of all things/persons that have the quality/property in question.
- For example, *cow* means





# Hyponymy

- *dog* means the collection of all dogs
- *mammal* means the collection of all mammals



- X is a **hyponym** of Y = the meaning of X is contained in the meaning of Y

# *Synonymy*

- A is *synonymous* with B = the meaning of A is the same as the meaning of B



- *couch* means



- *sofa* means



# *Antonymy 1 (gradable + complementary)*

- Suppose that each adjective means “the collection of all things/persons that have the quality/property in question”
- *happy* then means → 
- *unhappy* means → 
- A and B are antonymous = The meanings of A and B do not overlap.

# *Complementary vs. gradable antonyms*

- Complementary (no grey areas)

married/unmarried

alive/dead

- Gradable (comparatives are possible;  
intermediate “areas” exist)

easy/hard, old/young

# *Antonymy 2*

## *(converses/relational opposites)*

- Not all anonymous pairs can be explained in this manner.
- parent vs. child
- teacher vs. student
- They are relational opposites.
- Informally: For any x and y, whenever x is A of y, y is B of x (and vice versa) = A and B are (relational) antonyms

## *Antonymy 3 (reverses)*

- right/left
- Inside/outside
- put together/take apart
- ascent/descent

# *Semantics of pronouns*

- Pronouns such as *he*, *him(self)*, *she*, *her(self)*, etc. stand for other nouns (NPs, to be more accurate)
- In some cases, a pronoun indicates the same object/person as another NP in the same sentence. In this case, these two expressions (the NP and the pronoun) are said to be co-referential.

# *Pronouns and coreferentiality*

- Having the same “index” (subscripted letter) indicates “sameness” of some sort. Often this means co-reference.
- John<sub>i</sub> said that he<sub>i</sub> was happy.
- \*John<sub>i</sub> blames him<sub>i</sub>.
- John<sub>i</sub> blames himself<sub>i</sub>.
- John<sub>i</sub> blames him<sub>k</sub>.
- \*John<sub>i</sub> blames himself<sub>k</sub>.



# *The use of pronouns*

- Non-reflexive pronouns: *I, you, he, she, they*
- Reflexive pronouns: *myself, yourself, himself, herself, ourselves*
- *Miss Jones invited \_\_\_\_\_ to the party.*
- *Mary asked if John could excuse \_\_\_\_\_.*

# *The use of pronouns*

- *Miss Marple invited \_\_\_\_\_ to the party.*
  - *me, \*myself, \*I*
  - *her, herself, him, \*himself*
  - *you, \*yourself*
- *Mary asked if John could excuse \_\_\_\_\_.*
  - *me, \*myself, \*I*
  - *her, \*herself, him, himself*
  - *you, \*yourself*

# *Reflexive pronouns do not always mean “co-reference”*

In some cases, reflexive pronouns are used when the “sameness” cannot be captured in terms of “co-reference”.

Every boy likes himself.

Every boy thinks that he is smart.

(one of the two readings)

*Himself does not denote the same object as every boy.*

# *Intersective adjectives*

- The text calls this “pure intersection”: not a good term from the viewpoint of Set Theory
- Examples: color terms (blue, yellow, etc.)  
Adjectives such as nice arguably receive intersective interpretations at least in some cases (e.g. Mary is a nice person.)
- Most adjectives are not really intersective.

## *“subsective” adjectives*

- The textbook uses the term “subsective”.
- Adjectives like big, small, competent, fast, etc. They take the meaning (a set) of a noun and yields its **subset**. So I would call them **subset-yielding adjectives**.

# *Intensional adjectives (part1)*

- Our text uses two non-standard terms (**non-intersection/anti-intersection**). Formal semanticists use the term **intensional adjective for both**.
- E.g. alleged (non-intersective), fake (anti-intersective), etc.
- Definition: non-intersective (can include members of the original set) anti-intersective (must not include members of the original set)

## *Intensional adjectives (part 2)*

- Intensional adjectives (semanticists' term)
- Their crucial characteristic: “Adj CN” and “CN” **may not** have anything in common: consider examples like *fake gun, alleged criminal, prospective student*.