

Semantics: The Analysis of Meaning

L-10 : Language and Linguistics-I

Meaning

- To understand language
 - the meaning of a word that makes it a word in the language to be used for communication
 - The relationship of words to phrases and to sentences
 - Context which determines the meaning (Pragmatics)

Types of Meaning

- Conceptual vs. associative meaning
- Denotative vs. connotative meaning
- conceptual/denotative= literal use of the word.
- Associative/ connotative= different associations with the conceptual meaning
- E.g. needle= 'thin, sharp, steel, instrument' is associated with 'pain', 'blood' or 'illness'
- Other examples: night- rose?

What is Semantics?

- The study of meaning of words, phrases, and sentences.
 - Lexical semantics (words and meaning relationship among words)
 - Phrasal/ sentential semantics (syntactic units larger than a word)
- What a speaker conventionally means (objective or general meaning)- *not what he is trying to say* (subjective or local meaning)
- Three types of semantic analysis:
 - Words as ‘containers’ → *Semantic features*
 - ‘roles’ they fulfill → *Semantic roles*
 - ‘relationship’ with other words → *lexical relation*

Semantic features

Syntactically correct sentences but semantically odd.

- *Colorless green ideas sleep furiously.*
- *The Eiffel-tower studies linguistics.*
- *The table listens to the radio*

This relates to the conceptual components of the words 'hamburger, cat & table' → *not human*.

- Semantic properties: The components of meaning of a word.
- Meaning as collection of properties/features typically with two possible values (+ / -)
- Example of componential analysis:
baby is [+ young], [+ human], [+animate]

Semantic Features

	<i>table</i>	<i>horse</i>	<i>boy</i>	<i>man</i>	<i>girl</i>	<i>woman</i>
animate	-	+	+	+	+	+
human	-	-	+	+	+	+
female	-	-	-	-	+	+
adult	-	+	-	+	-	+

Identify the features (1)

1. (a) widow, mother, sister, aunt, maid

(b) widower, father, brother, uncle

→ The (a) and (b) words are [+ human]

→ The (a) words are [+ female]

→ The (b) words are [+ male]

2. (a) bachelor, paperboy, pope, chief

(b) bull, rooster, drake, ram

→ The (a) and (b) words are [+ male]

→ The (a) words are [+ human]

→ The (b) words are [+ animal]

Semantic roles

Words are described according to the roles they fulfill with the situation described in a sentence.

The boy *kicked* the ball

verb → indicates action

Boy → performs the action= **agent**

Ball → undergoes the action= **theme**

The NPs describe the role of entities (people or things) involved in the action, i.e. they have certain semantic (or thematic) roles.

Agent= the entity that performs the action

Theme= the entity that undergoes the action

Experiencer= one who perceives something

Instrument= an entity used to perform an action

Location= the place where the action happens

Source= the place from which an action originates

Goal= the place where the action is directed

Semantic roles

All these semantic roles are illustrated in the following scenario. Note that a single entity (e.g. *George*) can appear in several different semantic roles.

Mary saw a fly on the wall.

EXPERIENCER THEME LOCATION

She borrowed a magazine from George.

AGENT THEME SOURCE

She squashed the bug with the magazine.

AGENT THEME INSTRUMENT

She handed the magazine back to George.

AGENT THEME GOAL

“Gee thanks,” said George.

AGENT

Lexical relations

- What is the meaning of ‘big’?
 - ‘Large’ or the opposite of ‘small’
- What is the meaning of ‘daffodil’?
 - A kind of flower
- Analysis in terms of lexical relations- *it explains the meaning in terms of the relationship with other words*
 - Synonymy
 - Antonymy
 - Hyponymy
 - Prototype
 - Homophones and Homonyms
 - Polysemy

Synonymy

- **Synonymy**: words that have the same meanings or that are closely related in meaning
- E.g. answer/reply – almost/nearly – broad/wide – buy/purchase – freedom/ liberty
- ‘sameness’ is not ‘total sameness’- only one word would be appropriate in a sentence.
 - E.g. *Sandy only had one answer correct on the test.* (but NOT reply)
- Synonyms differ in formality
 - E.g buy/purchase – automobile/car

Antonymy

- **Antonymy**: words that are opposites in meaning, e.g. hot & cold.
- Types
- *Gradable*= not absolute, question of degree
 - Hot & cold – small & big
- *Non-gradable*:
 - Dead & alive – asleep & awake

E.g.

happy/sad

married/single

present/absent

fast/slow

Synonymy & Antonymy

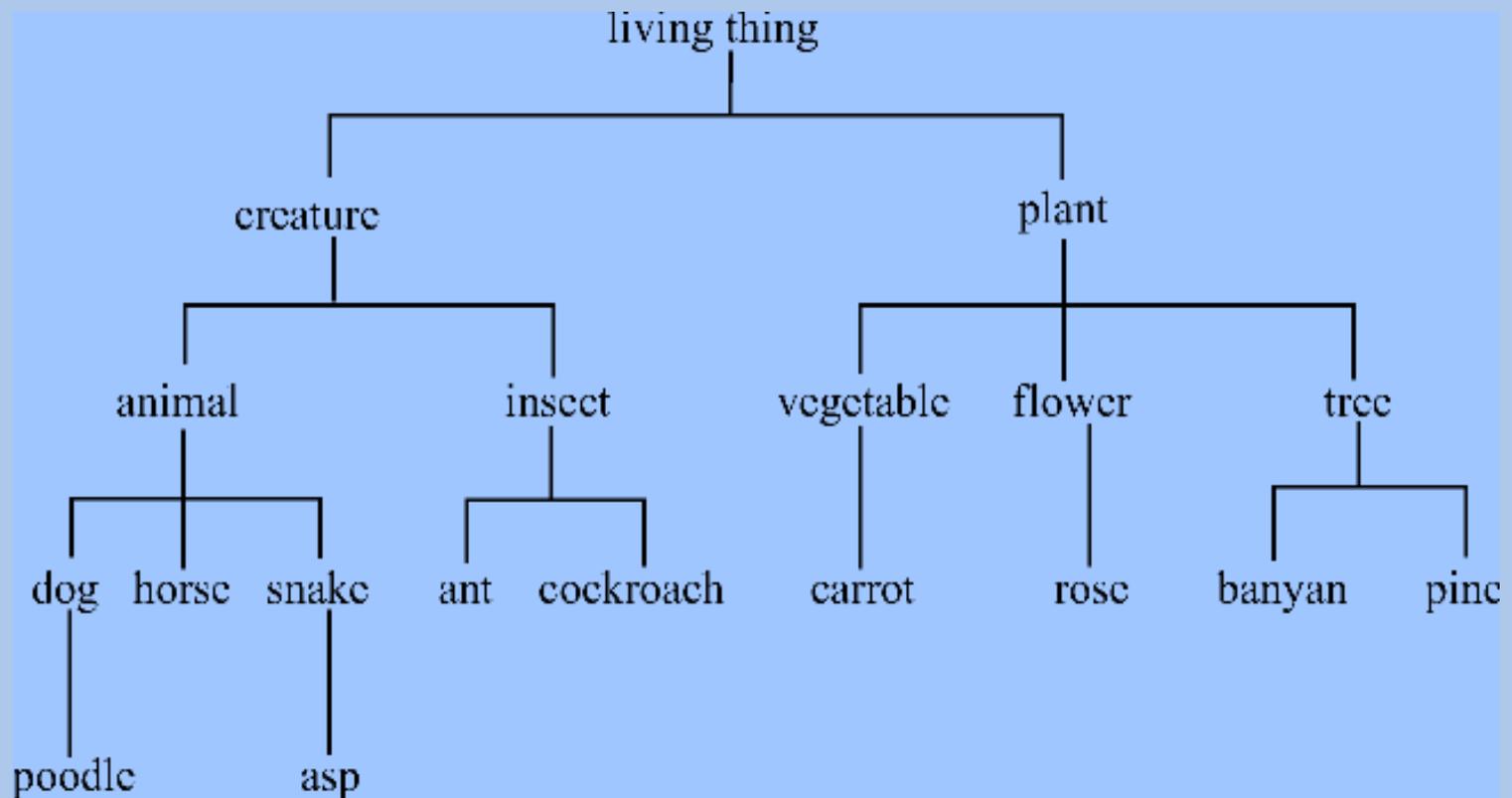
Synonymy or Antonymy

- Flourish – thrive a. synonym
- Intelligent – stupid b. antonym
- Casual – informal c. synonym
- deep-profound d. synonym
- Drunk – sober e. antonym
- Sofa – couch f. Synonym
- Hide – conceal g. Synonym
- cheap – expensive h. Antonym
- Rich - wealthy i. synonym

Hyponymy

- **Hyponymy**: Words whose meanings are specific instances of a more general word, i.e. *one thing is included (kind of) in another thing*.
 - e.g. cats and dogs are hyponyms of the word animal.
- In this case cats and dogs are co-hyponyms share the same ‘superordinate’
- Other e.g. daffodil & flower / carrot & vegetable / ant & insect

Hyponymy



Prototypes

- Canary— dove— duck —flamingo —parrot-robin ‘bird’
- The best example that belongs to a bird is ‘robin’, but what about ‘*ostrich*’ and ‘*penguin*’?
→
- **Prototype**: Characteristic instance
- Furniture — *chair* is a better example than *bench* or *stool*.
- Clothing — *shirts* more than *shoes*

Homophones and Homonyms

- **Homonymy:** A word which has two or more entirely distinct (unrelated) meanings,
 - e.g. **bank:** ‘financial institution’ ; ‘of a river’.
 - **Bat:** ‘flying creature’ or ‘used in sports’
 - **Race:** ‘contest of speed’ or ‘ethnic group’
- **Homophony:** Different words pronounced the same but spelled differently,
 - e.g. *two, to* and *too*.
 - *Flour* and *flower*
 - *Meat* and *meet*
 - *Right* and *write*

Polysemy

- **Polysemy:** A word which has multiple meanings related by extension,
 - e.g. *bright*: ‘shining’ ; ‘intelligent’
 - ‘*Head*’ of the body and the person at the top of a company.
 - ‘*Foot*’ of a body and of a mountain and of the bed or chair.
 - ‘*Run*’ a person runs, the water runs

Metonymy

- *What do you think about these sentence?*
 - He drank the whole bottle. (*container-content*)
 - The White House announced. (*king-crown*)
 - I gave her a hand. (*whole-part*)
- A word substituted for another word with which it is closely associated e.g. bottle is used for water
- **Metonymy** is "a figure of speech in which an attribute or commonly associated feature is used to name or designate something." A short definition is "part for whole."

Collocation

- Words tend to occur with other words.
- E.g. table/chair
- Butter/bread
- Salt/pepper
- Hammer/ nail

Word meaning

- Word meaning including:
 - A. features
 - B. prototypes
 - C. stereotypes
 - D. relational meanings (degree, direction)
 - E. reference and sense (take us into semantics of longer expressions)

Features

- Definition: more basic concepts/ideas that cannot be “defined” any further; primitive semantic elements.
- Combinations of features: [+ -] (e.g., see Nash 94-95)

A. Advantages

1. a universal element found in all langs. (Nash 95)
2. similar to phonological features

B. Disadvantage: very limited application

Advantage 1: Universal

- While we may speak different languages, we're all humans with the same human brain, & perceive the world with the same human senses.

e.g. [+HUMAN], [+ANIMATE], [+ROUND],
[+MALE], [+FEMALE], [+LIQUID], [-
MOVEABLE], etc.

Advantage 2: Similar to Phonological Features

- Psychologically similar to phonological features
- Same kind of mental operation; from phonology → semantics
- Phonemes: defined by its features
e.g. /p/=+consonantal, -voiced, +stop,
+bilabial

Disadvantage

- Very limited application—do not work for many words
 - e.g. A. chair/stool/bench/bean bag
 - B. ugly/beautiful
 - C. red/green
 - D. table/desk
 - E. book/pamphlet
- Lead to idea of prototypes

Prototype

- Definition: a typical/ideal example (serving to represent the whole class); an exemplar
- Concept of prototype: helps explain meaning of certain words in terms of resemblance to the clearest exemplar.
- Eleanor Rosch's experiments:
 - A. bird:
Robin, sparrow, canary, dove, lark, parrot, owl, peacock, duck, penguin, ostrich, bat
 - B. clothing:
shirts, dresses, skirts, bathing suit, pajamas, shoes, stockings, the hat, gloves
 - C. vegetable:
pea, carrot, cauliflower, onion, potato, mushroom

Stereotype

- Definition: a list of typical characteristics of describing something; more abstract representation of possible qualities
e.g. bird: feathers, wings, beak, fly, lay eggs

Relational Meanings

- Words may differ +- a feature. But, many sets of words differ, or may be grouped, in other ways, including “degree” and “direction.”
- Degree: amount—contrast to +- of features
e.g. hot/cold, long/short, tall/short, hard/soft, good/bad, wet/dry, beautiful/ugly
- Direction: for example, buy/sell, come/go, give/receive, borrow/lend, read/write.
- Note: A. “father”—also relational (in a different way)
B. kill and hurt—cause and effect relations
(Nash 97)

Longer Expressions

- Reference and sense: applying to semantics of both words and longer expressions
- Reference: dealing with the relationships between language and the world (Nash 98)

e.g. “My son is in the beech tree.”

identify person identify thing

- Sense: dealing with relationships inside the language.

e.g. **The moon** was bright last night. (reference)

My love is like the moon. (sense)

Reference and Sense (2)

- The same word can have more than one sense. For example, “bank”
 - a. I have an account at the Bank of Scotland.
 - b. We steered the safe to the other bank of the river.
 - c. The DC-10 banked sharply to avoid a crash.
 - d. I banked the furnace up with coke last night.
 - e. a bank shot

Reference and Sense (3)

- Other examples:
my father/ the man who married my mother.
different senses, although refer to the same person (=same reference)
- Could have different reference
e.g. stepfather or illegitimate child