Handout 7: Semantics I

1. Introduction

Semantics deals with the content side of linguistic signs, i.e. with the meaning of words and sentences

Semantics

<table>
<thead>
<tr>
<th>lexical semantics (word semantics)</th>
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<tbody>
<tr>
<td>sentence semantics (formal semantics)</td>
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2. Some fundamental concepts

- **lexicon**: the sum of all lexemes of a language
- **referent**: the entity (object, person, state of affairs etc.) in the external world to which a linguistic expression relates in a particular situation
- **sense/intension/denotation**: those features and properties which define a linguistic expression (content without reference)
- **extension**: the class of entities to which a lexeme is correctly applied (reference potential)

3. Basic semantic relationships

3.1 **Paraphrase**: one statement has the same meaning as another

3.2 **Entailment**: Sentence A entails sentence B if B is a logically necessary consequence of the first. (e.g. *Jim lives in Manchester* entails *Jim lives in England*)

3.3 **Contradiction**: If one statement is true the other must be false. (e.g. *Joan is a spinster* contradicts *Joan has been married three times*)

3.4 **Anomaly**: A sentence has no meaning in the everyday world (e.g. *Colourless green ideas sleep furiously*)

3.5 **Lexical ambiguity**: A word allows more than one meaning in context: *Bank*, for example, can mean ‘financial institution’, ‘edge of a river’, or other things. (see § 4)

4. Ambiguity: homonymy and polysemy

- **homonymy**: two different words are identical in form; if both writing and pronunciation are the same we speak of total homonymy. If not:

  homophony (night – knight; threw – through; write – rite; flower – flour; meet – meat; bare – bear)

  homography (wind ‘Wind’ – wind ‘drehen’; lead ‘Blei’ – lead ‘Hundeleine’)

• **polysemy**: there is a systematic relationship between the meanings of one word (a *mouth* can be an ‘opening area through which an animate being takes food’ or ‘the part of a river which empties into a lake or a sea’; cf. also *wing*; *school*; *church*; *university*)

5. Metonymy and metaphor
• the different senses of a polysemous word are typically related via metaphor or metonymy

• **metonymy**: the replacement of an expression by a factually related term; spatial, temporal or causal contiguity – things that occur together

(1) He owns a Picasso and two Rembrandts. (producer for product)
(2) The buses are on strike. (tool for user)
(3) The White House is planning to attack Iraq. (place for institution)
(4) The university will reject this proposal. (institution for responsible persons)
(5) The chicken sandwich wants to pay. (meal for consumer)
(6) He’s a good hand at gardening. (part for whole ‘pars pro toto’)

• **metaphor**: a relationship of similarity between two objects or concepts. A Word is transferred from one conceptual domain to another

<table>
<thead>
<tr>
<th>source domain</th>
<th>target domain</th>
</tr>
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<tbody>
<tr>
<td>illuminating/obscure ideas; a bright person; a clear argument; make ideas transparent</td>
<td>LIGHT</td>
</tr>
<tr>
<td>shoot down an argument; attack a weak point in someone’s argument</td>
<td>WAR</td>
</tr>
<tr>
<td>coin new words; owe someone an answer; richness in expressions</td>
<td>MONEY</td>
</tr>
<tr>
<td>feel up/down; fall into a depression; fall from power; be under control; be at the bottom of the social hierarchy</td>
<td>UP/DOWN</td>
</tr>
</tbody>
</table>

6. Presupposition
A presupposition is an assumption about the world whose truth is taken for granted in discourse. Presuppositions may be triggered by individual words.
(1) a. John managed to repair his computer.
   b. presupposed: John tried to repair his computer.
   c. presupposed: John has a computer.

• Presuppositions are stable under negation:
(2) a. John didn’t manage to repair his computer.
   b. presupposed: John tried to repair his computer.
   c. presupposed: John has a computer.
7. Sense relations

7.1 Synonymy
- two words have the same meaning: kill – murder, strong – powerful, glad – happy
- absolute synonymy does not exist: there are always some contexts in which one member of the pair cannot be used.
- often the choice between one or the other of two synonyms is determined by questions of style and register: dease, pass away, perish, expire, snuff it, kick the bucket, bite the dust.

7.2 Hyponymy: the meaning of a word is included in that of another

```
creature

animal
  - dog
  - elephant

bird
  - robin
  - eagle

fish
  - cod
  - trout

insect
  - ant
  - butterfly

spaniel
alsatian
```

- **hyponym** = subordinate term
- **hyper(o)nym** = superordinate term
- **co-hyponyms** = the set of words which are hyponyms of the same superordinate term

**Exercise 4:** Draw a tree like the one in Figure 1 with at least three levels and six terms overall. Use any category you want (e.g. means of transport; plants…)

7.3 Meronymy (partitive relation; part-whole relation)

```
body

head
neck
trunk
arm
leg

forearm
hand

palm
finger
```

7.4 Oppositeness (‘antonymy’ in the wider sense)

different types: (i) **contradictory contrast**; (ii) **gradable antonymy**; (iii) **converses**; (iv) **directional opposition**

- **contradictory contrast** = two expressions are in complementary distribution, i.e. they exclude each other absolutely: alive – dead, man – woman, true – false, open – shut, hit – miss (a target), pass – fail (an examination); normally not gradable: ?extremely true, ?fairly dead, ?a little shut, ?more married than most, ?moderately female
• **gradable antonymy** = two expressions designate endpoints on a scale of ‘more or less’; the negation of one does not entail the applicability of the other: *long – short, fast – slow, easy – difficult, good – bad, hot – cold*

• **converses** = two expressions represent the same event or the same relation from contrasting perspectives: *above – below, in front of – behind, before – after, parent of – child of, teacher – pupil, master – servant, guest – host*

• **directional opposition** = two expressions denote motion or change in opposite directions: *rise – fall, ascend – descend, advance – retreat, enter – leave, marriage – divorce, learn – forget*

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**Exercise 5:** What is the relation between the following pairs of words?

(a) shallow – deep  
(b) mature – ripe  
(c) suite – suite  
(d) table – furniture  
(e) single – married  
(f) move – run

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*Reading. Brinton* 138-142