

S&P 2012 Lecture 2: 'Technical Specifications' of the Language Tool (1)

Today's Menu:

1. The smallest units of the social 'spinning wheel' – word-meanings
2. The 'systemic' relationships between word-meanings (a.k.a. 'lexical relations' of *synonymy/ antonymy, hyponymy/hypernymy, meronymy/holonymy, polysemy & homonymy*)
3. 'Semantic features' – a tool in descriptive semantic analysis

1. The smallest units of the social 'spinning wheel' – word-meanings

Every word of Language is already a **generalization** – an **ACT** of thought.

This concept is fundamental to the dialectical view of Language – it breathes life into Saussure's Sign, infusing it with the living energy of human minds, all thinking and communicating their thoughts in Time, in order to survive. This single proposition merges all the psycho-physical and socio-historical dualities of Language into one indivisible complex WHOLE of the Sign. **Word-meaning** is the **smallest unit of Language**, because it has all the properties of the WHOLE:

- **Psychological**: word without meaning is empty sound
- **Physical**: ideas come into existence only through words
- **Historical**: they live, grow, change, develop, and die in human minds that live in Time
- **Social**: the double function of the Sign – (1) voluntary communication of (2) meaning.

The conception of word-meaning as a unit of both generalising thought and social interchange is of incalculable value for the study of thought and language (Vygotsky: 1934).

... The qualitative distinction between sensation and thought is the presence in the latter of a generalised reflection of reality, which is also the essence of word meaning: and consequently that meaning is an act of thought in the full sense of the term.



Lev Vygotsky (1896-1934)

Now, if every word is an *act* of thought, who is the *Actor*? Who creates all the words of language that make up the 'system of arbitrary symbols used for communication'? They are the **generalizations of our Collective Mind** – those categories 'which, by tacit convention, human society regards as a unit' at any point in time (Vygotsky: 1934). Called **denotative¹ meanings**, these socially **shared** meanings change relatively slowly and so can be 'fixed' in a dictionary. They are the social 'yarn' that we use to spin our individual 'webs of significance' (sentence-mosaics). Denotative meanings denote/name the concepts we as society have formed about the world we live in.

Because all societies live and think in time, the generalizations of their Collective Minds will always reflect their own, unique ways and collective experiences. Like threads of different colors, denotative meanings can be woven in an infinite variety of ways to make unique mosaic images. Speakers, like artists, use them to spin their own web mosaics, and the quality/clarity of their 'webs of significance' depends on their 'spinning skills,' on how well they can use the social 'spinning wheel.'

Let us now zoom in on the colored threads of language (denotative word-meanings) and examine them and the relations between them more closely.



¹ To **denote** means to name concepts, to signify.

2. The 'systemic' relationships between denotative word-meanings

Each society creates its own language 'spinning wheel' with multicolored yarn of word-meanings which speakers use to spin their 'webs of significance.' If we 'zoom in' on the multicolored yarn, we will see both similarities and contrasts in the colors of its threads. Based on these similarities and differences between them, we can group them into categories and describe the relationships between them. Semantic analysis has thus established regular **lexical relations** between word-meanings in all languages, which fall (not surprisingly!) into those based on resemblance, and those based on contiguity²:

(a) Lexical relations based on Resemblance (or lack of it)

Concepts may be very similar (or opposite) in meaning; these relationships between them are called **synonymy** and **antonymy**:

Synonyms are words with similar meanings, i.e. *liberty* : *freedom*, *broad* : *wide*, *near* : *close*, *kind* : *good-hearted*, etc. There are no perfect synonyms - no two words ever have exactly the same meaning in all contexts: to 'break' is synonymous with 'snap' in the phrase 'break/snap a stick into two', but not in 'snap/ *break one's fingers' or 'break/*snap a world record.' This, semanticists claim, is because meanings can 'overlap' in some contexts and diverge in others.

Antonyms are words with opposite meanings, and the several types of contrast between them may be

- ❖ **Complementary** (the negative of one automatically implies the other); for example: *single* (= not married) : *married* (= not single), or *easy* (= not hard) : *hard* (= not easy), *alive* (= not dead) : *dead* (= not alive)
- ❖ **Gradable contrast**, i.e., big : small, hot : cold, fast : slow, happy : sad, etc. With gradable pairs, the negative of one is not synonymous with the other; for example, *not happy* is not necessarily *sad*, *not cold* is not the same as *hot*, etc.
- ❖ **Relational opposites** (contrast depends on perspective): husband : wife, give : take, buy : sell, teacher : pupil, parent : child, provider : user, etc.

Other types of resemblance between word-meanings (in sound, spelling or meaning) include **homonymy** ('same name') and **polysemy** ('multiple meanings'):

Homonymy

Homonyms are words which have **the same form** (orthographic or phonetic), but **unrelated meanings**. If they only differ in one way, they are called homophones or homographs, respectively:

- ❖ **Homonym** = 'same name': *bat* (tennis) : *bat* (flying rodent), *grave* (serious) : *grave* (burial site), etc.
- ❖ **Homophone** = 'has the same sound': two : too, break : brake, flower : flour, I : eye, etc.
- ❖ **Homograph** = 'written the same way': lead (the metal) vs. lead (not follow), moped (motorized bicycle) vs. moped (wallowed in self-pity), etc.

For example, there is a fish called a *fluke*, a part of a whale called *fluke*, and a stroke of luck called a *fluke*, but these are three different words with separate histories (etymologies) – they just happen to share the same form. Similarly, a river *bank* and a savings *bank* share the same spelling and sound, but have unrelated meanings and etymology (they are *homonyms*).

Homonymy usually results from an *accidental phonological similarity* between two unrelated words; for example, the words *bark* (of a dog) and *bark* (of a tree) come from two completely different historical sources. The first is from Anglo Saxon *beorcan*, and the second is from Old Norse *börkr*.

² Associations by Resemblance, Contiguity in space or time, and Cause/Effect underlie all human understanding (Re: Genesutra 1)

Homonymy may also result when two related meanings drift apart over time. The word *sole* (a kind of fish) was originally related to the word *sole* (of the foot), because the sole of the foot is flat, like the fish.

Polysemy

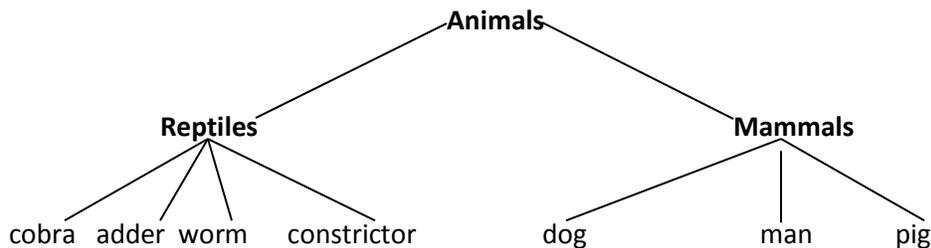
Polysemy (*poly-* = many; *-sem-* = meanings) refers to words with multiple *historically related* meanings. Polysemy almost always arises historically when a meaning of a word is extended to include a new meaning (i.e., when a word begins to be commonly used in a new sense, while also retaining its original meaning). For example, the word *fork* can refer either to a branch in the road, an instrument used for digging, or to a utensil used for eating. The three senses of *fork* are all related in terms of shape (metaphoric extension by resemblance).

Polysemy results from the **conventionalization** of a semantic extension and the **retention** of the original meaning.

Polysemy is different from **homonymy**, where two lexical items happen to have the same form purely by chance. Polysemous senses of a lexical item always have related meanings. You can usually tell if words are polysemous or homonymous by the way they are listed in the dictionary – if a word has multiple meanings (polysemic), then its meanings will be listed as part of a single entry; if unrelated, then the words (homonyms) will appear as different entries.

(b) Relationships based on Contiguity

Hyponymy/Hypernymy, as between *dolphin* : *mammal*. In other words, to describe hierarchical relationships between things, we use the **inclusion principle**:



Hyponyms are the members of a **hypernym** (the larger category). Examples of hypernymy/hyponymy:

- ❖ To **go**: to *walk, stroll, strut, pace, march, hobble*, etc;
- ❖ To **sleep**: to *nap, snooze, snore*, etc.
- ❖ To **laugh**: to *smile, to snigger, to guffaw, to giggle*, etc.

Meronymy/Holonymy expresses slightly different types of hierarchical relationships existing between parts and wholes, members and the group they make, and objects and the physical substances they are made of:

Part : Whole	→	branch, root, leaf : tree; tail, ears, belly : pig; heart, liver, kidney : body, etc.
Member : Group	→	tree : forest; student : class; cow : herd; family : society, etc.
Matter : Object	→	wood : tree; brick : house; plastic : bottle; rubber : ball, etc.

3. 'Semantic features' – a tool of descriptive semantic analysis

Traditional descriptive semantics zooms in even closer on word meanings, trying to discover what are made up of. It breaks isolated word meanings into their **semantic components** (also called **semantic properties** or **semantic primes**); for example, the component *male* is a semantic property of *boy, man, grandfather, Dad, bull, stallion, cock*, etc.). A rather complicated system of **semantic features** (a notational device for expressing the presence or absence of semantic

properties by pluses and minuses) has been devised for that purpose. Semantic features are supposed to cover the 'core properties' of isolated words; for example:

'woman'	-	[+human], [- male], [+adult]
'man'	-	[+human], [+male], [+adult]
'boy'	-	[+human], [+male], [- adult]
'girl'	-	[+human], [- male], [- adult]

It is not always easy, however, to identify semantic properties – many abstract concepts cannot be broken into 'components' of meaning (i.e., *advice, threat, hope, or implication*, etc.). That is why this type of semantics focuses primarily on content words expressing concrete ideas, such as *mango, shoe, cup*, etc., rather than on abstract concepts or function words (i.e., prepositions, auxiliaries, etc.) whose meanings are generally more abstract /grammatical.

Conclusion

All these categories of word-meanings and lexical relations between them are the result of our ability to generalize, *create* and *connect* ideas based on resemblance, contiguity, and cause/effect. Association by **resemblance** is the **cause** of why we group concepts together (**cause/effect** & **contiguity** in space or time) – this is the mechanism of all **generalizing** by the collective mind of the society, as well as by individual speakers' minds. Because minds, the 'generalizers,' live and change in time, their thoughts/generalizations also live and change in Time: the same principles of human understanding shape all new generalizations and thus cause development and change in word meanings over time. Several types of semantic change are on our next week's menu.