

Unit 12 Semantics – the Study of Meaning

Objectives

After completing this unit, you will be able to

1. Explain the meaning of such concepts as *semantic properties* & *semantic features*
2. Define the concept of *lexical relations* and distinguish between their types:
 - a. *synonymy*
 - b. *antonymy*
 - c. *homonymy/ homophony/ homography*
 - d. *polysemy*
3. Identify the ‘drivers’ of semantic change
 - a. **Metaphor**: change based on a similarity of senses
 - b. **Metonymy**: change based on a contiguity of senses
4. Distinguish between four types of semantic change:
 - a. *Widening* of meaning: raise of quantity
 - b. *Narrowing* of meaning: loss of quantity
 - c. *Amelioration* of meaning: raise of quality
 - d. *Pejoration* of meaning: loss of quality

12.0 Introduction

We have already talked a lot about meaning (which is what language is all about), and the way we create complex meanings by combining its units (morphemes, words, phrases, and sentences) together. This unit will introduce you to some concepts and categories used in semantic analysis.

We should remember, however, that categories are not objectively ‘out there’ in the world – they exist in human minds and are rooted in people’s experience. That is why conceptual categories may vary from person to person (in sciences, from scholar to scholar), and from culture to culture.

With this word of warning, let us now examine some concepts and categories used in semantic analysis.

12.1 Semantic Properties & Semantic Features

Language creates meaning on many levels: morphemes, words, phrases, sentences, etc. Since larger units of meaning are made up of smaller ones, we shall first focus first on the meaning of individual words, or (more accurately) *lexical items*.

Semantic properties (also called *semantic components*, or *semantic primes*) are the components of meaning of a word, for example, the component *male* is a semantic property of *boy*, *man*, *grandfather*, *youth*, *bull*, *stallion*, etc. Of course, we remember from our earlier discussions, that meaning in ‘live’ communication is a relative

concept – it depends on *how* people use words (meaning as use). Semantics, however, deals with conventional meanings (those listed in dictionaries).

Semantic features represent a notational device for expressing the presence or absence of semantic properties by pluses and minuses. In other words, it is a way of recording elements of concept meaning, based on a range of listed criteria. Semantic features cover core properties of word-meanings. For example:

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

It is not always easy to identify semantic properties – many abstract concepts are difficult to break into 'components' of meaning (take, for example, *advice*, *threat*, or *implication*). That is why this type of semantics focuses primarily on *content words* (concrete ideas, such as *mango*, *run*, *blue*, etc.), rather than on abstract concepts and *function words* (i.e., *of*, *which*, *that*, etc.) whose meanings are generally more abstract /grammatical.

Activity 12.1

For each group of words below, which semantic property(s) are shared by the 2 groups, and which distinguish between them?

Example: a. widow, mother, sister, aunt, seamstress
b. widower, father, brother, uncle, tailor

The (a) and (b) words are "human."

The (a) words are "female" and the (b) words are "male."

- A. a. bachelor, man, son, paperboy, pope, chief
b. bull, rooster, drake, ram, stallion
- B. a. table, stone, pencil, cup, house, ship, car
b. milk, alcohol, rice, soup, mud
- C. a. pine, elm, ash, weeping willow, sycamore
b. rose, dandelion, aster, tulip, daisy
-

Semantic analysis also looks at how concepts relate to each other in the language; these relationships between word-meanings are called '*lexical relations*.'

12.2 Lexical Relations

Since every word of language is a generalisation, and therefore an act of *thought*, we will use the principles of human understanding (our natural way of thinking) to classify the relationships between word-meanings by Resemblance and Contiguity.

12.2.1 Relationships 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*:

Synonymy

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 is because meanings can 'overlap' in some contexts and diverge in others.

Activity 12.2a

Create a list of synonyms for the following words: *river*, *mountain*, *house*, and *happy*.

Antonymy

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

- ⇒ **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): *give* : *take/ receive*, *buy* : *sell*, *teacher* : *pupil*, *parent* : *child*, etc.

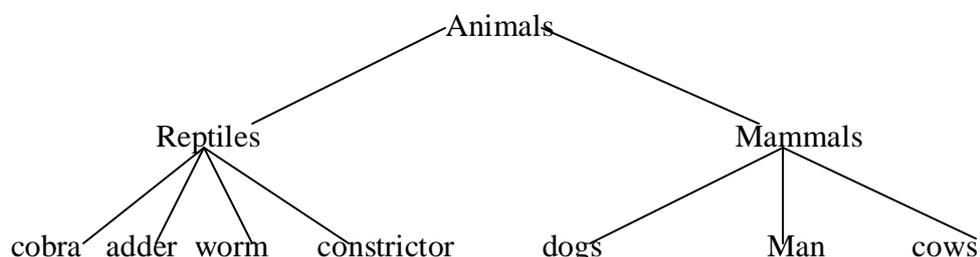
Activity 12.2b

There are several kinds of antonymy. Determine whether the pairs in columns A and B are complementary, gradable, or relational opposites:

A	B	Which kind of antonymy?
good	bad	
expensive	cheap	
fat	thin	
lecturer	student	
false	true	
beautiful	ugly	
pass	fail	
husband	wife	
asleep	awake	

12.2.2 Relationships based on Contiguity

A relationship between words in which one word-meaning is included in another is called **hyponymy**. To classify things as belonging to a category, we use the **inclusion** principle to build a hierarchy of related concepts, for example:



In hyponymy, one word may be replaced by a second word, but not the other way around, without a significant change in meaning. The concept “animal” entails “reptile” which in turn may entail “Papuan Black” or any other type of snake, but the entailment does not go the other way around (*reptile* is not the same as *rattle snake*, it has a more general meaning). Examples of hyponymy:

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

Activity 12.2c

Create a list of hyponyms for the more general concepts, such as *tree* and *vehicle*.

12.3 Homonymy & Polysemy

There are several other terms (which you may remember from Unit 1) that also describe relationships between words in a language.

12.3.1 Homonymy

Homonyms (Re: Unit 1) 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** = ‘has the same name’: *bat* (tennis) : *bat* (flying rodent), *grave* (serious) : *grave* (burial site), *can* do : *can* of fish, etc.
- ⇒ **Homophone** = ‘has the same sound’: two : too, break : brake, flower : flour, etc.
- ⇒ **Homograph** = ‘has the same spelling, 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*.

Activity 12.3a

Which of the words below are homonyms/ homophones/ homographs?

blew/blue	fare/fair	hi/high	no/know
board/bored	feat/feet	higher/hire	none/nun
brake/break	find/finned	him/hymn	not/knot/naught
by/bye/buy	flea/flee	hole/whole	one/won
bolder/boulder	flower/flour	hour/our	or/oar/ore
browse/brows	foul/fowl	idle/idol	pail/pale
cell/sell	grate/great	jeans/genes	pain/pane
cent/scent/sent	guessed/guest	mail/male	
dose/doze	hall/haul	maize/maze	
eye/I	heal/heel/he'll	meet/meat	

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. Speakers of modern-day English do not find any such similarity of meaning.

12.3.2 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 (e.g. *bat* ‘stick used for hitting a baseball’ vs. *bat* ‘flying mammal’). Polysemous senses of a lexical item always have related meanings. Homonyms, on the other hand, do not normally 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, on the other hand, word-meanings are unrelated (homonyms), then they will appear as different entries.

Activity 12.3b

Which of the examples below are best described as polysemy, or as homonymy?

Date (fruit)	Date (time)	?
Bank (financial institution)	Bank (river side)	?
Read (past tense)	Red (colour)	?
Lamb (baby sheep)	Lamb (meat)	?
ad	add	?
inn	in	?
chips (potato)	chips (computer)	?

As we have seen, the basis for all these categories/ lexical relations is our ability to *create* and *connect* ideas based on resemblance, contiguity, and cause/effect. Association by resemblance and contiguity are part of generalisation (= the mechanism of human thought). We have already seen how the principles of human understanding shape language structures (through *synthesis* and *analysis*, in terms of description/ modification/ specification of the main sentence constituents).

It is time now to consider how the same principles of human understanding drive semantic change (change in word meanings).

12.4 Metaphor & Metonymy – the ‘drivers’ of Linguistic Change

In semantics, association by resemblance is called *metaphor* and association by contiguity in space/time is called *metonymy*.

12.4.1 Metaphor

Metaphors express one concept in terms of another, based on some similarity between the two. Often, metaphor involves expressing a relatively abstract concept in terms of a relatively concrete one. Metaphors often apply to entire domains of experience, and affect entire discourses, not just isolated words, i.e.:

- ⇒ **happy/good = up; sad/bad = down:** i.e., I was feeling down, but now I’m feeling up again. My spirits rose, but then they sank. What can I do to lift your fallen spirits?
- ⇒ **time = money/ value:** You’re wasting my time. How do you spend your time? Is it really worth your time? You need to budget your time better. I’m living on borrowed time. This will save you a lot of time.
- ⇒ **mind = machine:** My math skills are a little rusty. He’s trying to grind out a solution to the problem. My mind just isn’t working properly.

- ⇒ **love = madness/ sickness:** I'm crazy about him. He drives me out of my mind. He raves about her all the time because he's mad about her. Our relationship is very healthy, but theirs is sick. We thought their marriage was dead, but now it's on the mend.
- ⇒ **seeing = touching:** His eyes are glued to the television. He can't take his eyes off of her. Their eyes made contact.

This type of metaphoric extension is a powerful tool for creating 'high-density' meaning. That is why both metaphor and metonymy are taught in writing classes as *figures of speech*/ literary devices for effective expression. Calling somebody 'honey,' 'tiger' or 'pig' automatically means that the speaker sees some similarity between the two. People have been aware of the power of metaphor (and metonymy) for thousands of years – the Sophists of Ancient Greece stressed the value of 'figures of speech' in rhetoric, and used it effectively in their writing.

Activity 12.4a

Why, do you think, this description of language by Gorgias, one of the sophists, is so memorable?

The power of speech has the same relation to the order of the soul as drugs have to the nature of bodies. For as different drugs expel different humors from the body, and some put an end to sickness, and others – to life, so some words cause grief, others joy, some fear, others render their hearers bold, and still others drug and bewitch the soul through an evil persuasion ...

Gorgias (~ 485-380 BC): *Praise of Helen*

12.2.2 Metonymy

Metonymy always involves an association between two things that **is based on something other than resemblance**. Any type of relationship 'based simply on a close connection in everyday experience'¹ is metonymic. For example, we often say things like, 'He drank a whole bottle.' Of course, what we really mean is that he drank *the contents* of the bottle, not the bottle itself. But the bottle and whatever was inside it were *close together in space and time*. This close association leads to a natural metonymic shift from one concept to the other. Compare also: *bottle shop*, to *go/be on the bottle*, to *drown one's sorrows in the bottle*, etc.

'Close connections in everyday experience' may include associations between

- ⇒ **Organisation and its management:** *Datec* employed new people recently. Or: *The University* will not agree to that.
- ⇒ **Controller and controlled:** I accidentally hit a tree when driving home yesterday – lucky it was not a pedestrian! Or: A truck hit John in the right front fender.

¹ Yule, G. *The Study of Language* (1996), p.122

- ⇒ **Producer and product:** *Chomsky*² is on the top shelf. Or: We have an old *Ford* (*Mitsubishi*, etc.).
- ⇒ **Part-Whole relationships:** We need more *boots* on the ground in Afghanistan (= troops). She's just another pretty *face* (= person). We need a *hand* here (= person who can help)

Some more examples of metonymy:

- ⇒ He lives **across** the street (across the street = at a *place* across the street)
- ⇒ The *ham sandwich* at table four needs more coffee (ham sandwich = customer who ordered a ham sandwich)
- ⇒ The *appendix* from Ward 7 was discharged today (= patient who had had his appendix cut out)
- ⇒ He walked through the *door* (= door frame/opening)
- ⇒ The *buses* are on strike (= bus drivers)
- ⇒ He's in *finance* (= the banking profession)
- ⇒ We need some *fresh blood* in the linguistics department (= new people)

Activity 12.4b

Think of 5 examples of metonymic extension

We have seen how metaphor and metonymy drive grammaticalization (semantic 'bleaching' and acquisition of more abstract grammatical meaning, accompanied by phonological reduction.

Metaphoric /metonymic extension also drive purely semantic change, which does not involve grammaticalisation (polysemy, in particular).

12.5 Semantic Change

We know that language is a living structure that functions as a whole, is constantly changing and self-regulating. Change of word-meaning over time occurs because words are constantly used in 'live' communication, and what we mean is not always understood (or perceived) the same way. Look, for example, at Alice's problem here:

'Then you should say what you mean,' the March Hare went on.
'I do,' Alice hastily replied, 'at least – I mean what I say – that's the same thing, you know.'
'Not the same thin a bit!' said the Hatter. 'You might just as well say that *I see what I eat* is the same thing as *I eat what I see!*'
'You might as well say,' added the March Hare, 'that *I like what I get* is the same thing as *I get what I like!*'

² Chomsky is a famous American linguist ☺

‘You might as well say,’ added the Dormouse, which seemed to be talking in its sleep, ‘that *I breathe when I sleep* is the same thing as *I sleep when I breathe!*’
‘It *is* the same thing with you,’ said the Hatter, and here the conversation dropped...

Lewis Carroll, *Alice’s Adventures in Wonderland*

Now, if a new word meaning becomes, over time, part of conventional usage, then a semantic change has occurred. Semantic change (development and transformation of word-meanings) happens over time, in contrast to ***meaning as use*** in live communication.

So, in historical/ diachronic linguistics, ***semantic change*** refers to a change in word meaning. An example of a recent semantic change is of the word *mouse*; with the advent of computer technology, the word for the rodent has been used to refer to the input device.

There are different types of change; the most neutral way of referring to change in word meaning is simply to speak of ***semantic shift*** which simply refers to change without stating what type it is.

12.5 Types of Semantic Change

Linguists have distinguished many types of changes in word meaning. Major categories of semantic change include

- ⇒ **Widening** – a shift to a more general meaning: i.e., in Middle English, *bridde* meant a ‘small bird’; later, *bird* came to be used in a general sense and the word *fowl*, formerly the more general word, was restricted to the sense of ‘farm birds bred especially for consumption’;
- ⇒ **Narrowing** – a shift towards a more specific concept: the opposite of widening, or expansion. i.e., *fowl* → chicken, *meat* which derives from Middle English *mete* with the general meaning of ‘food’ and now restricted to processed animal flesh. In turn the word *flesh* was narrowed in its range to ‘human flesh’.
- ⇒ **Amelioration**³ - a shift towards a more positive quality; an improvement in the meaning of a word: The term *nice* derives from Latin *nescius* ‘ignorant’ and came at the time of its borrowing from Old French to mean ‘silly, simple’ then ‘foolish, stupid’, later developing a more positive meaning as ‘pleasing, agreeable’.
- ⇒ **Pejoration** – a shift towards a more negative quality: i.e., Old English *cnafa* (boy: compare German *Knabe*) became Modern English *knave* someone dishonest; Latin *villanus* (a farm servant) became Middle English *vilain/vilein* (a serf with some rights of independence), then Modern English *villain* (a scoundrel, criminal). More examples of pejoration:

Lewd (Old English *læwede*) originally meant ‘non-ecclesiastical, lay’, then came to mean ‘uneducated, unlearned’ from which it developed into ‘vulgar, lower-class’ and then through ‘bad-mannered, ignorant’, to ‘sexually insinuating’.

³ Synonyms of *amelioration/ melioration*: improvement; betterment; mending, amendment, emendation

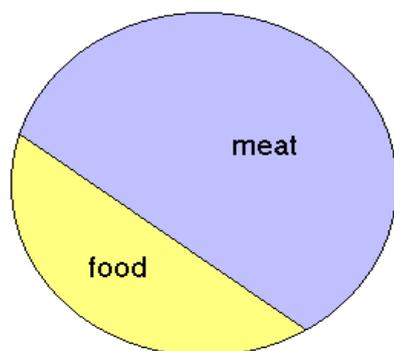
Artificial originally meant ‘man-made, artful, skillfully constructed’, compare *artifice* ‘man-made construction’. But by comparison with ‘natural’ the word came to acquire a negative meaning because everything which is natural is regarded positively.

Nice (Latin *nescius* ‘not knowing’) is recorded from the 13th century in the sense of ‘foolish’, then it shifted to ‘coy, shy’ and by the 16th century had the meaning ‘fastidious, dainty, subtle’ from which by the 18th century the sense ‘agreeable, delightful’ developed.

Silly (Old English *sēlig* ‘happy, fortuitous’) had by the 15th century the sense of ‘deserving of pity’ and then developed to ‘ignorant, feeble-minded’ and later ‘foolish’.

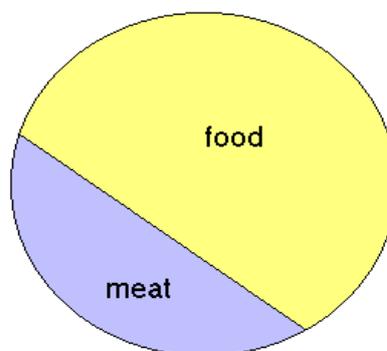
In morphology, there are inflectional paradigms; in semantics, similar a similar concept is represented by the **word field** where words and their meanings form in a network of relationships (lexical relations). The following graphs show two cases of semantic shift (changes in the word fields) in which the increase in the scope of one word is paralleled by the reduction in scope of a related word:

Word field in Middle English



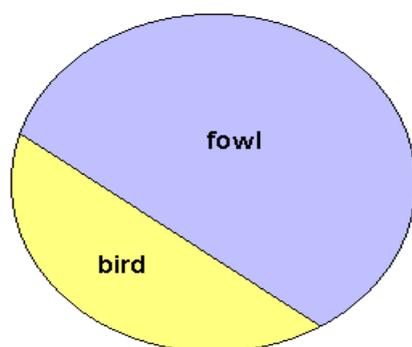
meat = "food in general"
food = "provisions; item of food"

Word field in Modern English



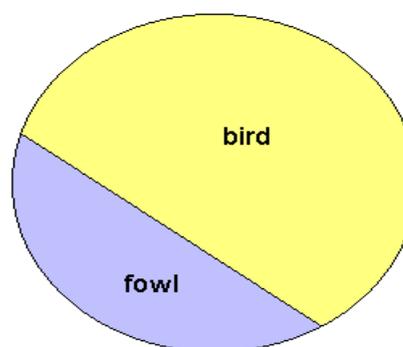
meat = "animal flesh"
food = "all types of nourishment"

Word field in Old English



fowl = "flying animal"
bird = "young bird, fledgling"

Word field in Middle/Modern English



fowl = "poultry"
bird = "flying animal"

Activity 12.5

Study the above charts and determine the type of semantic change that has occurred in each case.

Summary

1. Explain the meaning of such concepts as *semantic properties* & *semantic features*
2. *Lexical relations* refer to the relationships between words:
 - a. *Synonymy* refers to words with similar meanings
 - b. *Antonymy* refers to words with opposite meanings; antonyms can be
 - i. **Complementary:** *single* (= not married) : *married* (= not single), or *alive* (= not dead) : *dead* (= not alive)
 - ii. **Gradable contrast**, i.e., big : small, hot : cold, fast : slow, happy : sad, etc., and
 - iii. **Relational opposites** (contrast depends on perspective): give : take/ receive, buy : sell, teacher : pupil, parent : child, etc.
3. *Homonymy/ homophony/ homography* refer to unrelated meanings, whereas *polysemy* refers to having several related meanings as a result of metaphoric/ metonymic extension
4. *Metaphor* and *Metonymy* drive semantic change
5. Four types of semantic change are:
 - a. **Widening** of meaning: raise of quantity
 - b. **Narrowing** of meaning: loss of quantity
 - c. **Amelioration** of meaning: raise of quality
 - d. **Pejoration** of meaning: loss of quality