TUTORIAL
5.15

Semantics 1

This tutorial introduces semantics - the structured system of meaning within individual languages. We will begin by looking at lexical semantics, or the meaning that is contained in words and expressions.

Introduction

In the last tutorial we looked at the 'big picture' of language and meaning, and all the factors that help us to create and share meaning when we communicate with someone else. Now we are going to focus on *semantics*, which is the structured system of meaning within individual languages. It is the way the grammar and lexicon of a language construct meaning in words, and sentences, and the way parts of sentences relate to each other in terms of meaning.

A native speaker of a language has an unconscious knowledge of the operation of meaning in their language. They know, without thinking about it, how to use grammar to build meaning, and they unconsciously control the relationship between meanings of words and phrases. But, because it is a structured system that follows particular rules and patterns, we can look at the semantics of a language and see how that system works.

Semantics is the part of grammar that tells us there is a special relationship between *short* and *tall* in a way that there isn't between *short* and *forgetful*. It tells us that it is impossible to *meet a man who wasn't there* because the meaning of the word *meet* means the person who gets *met* must be present.

Semantics tells us that a *giant turtle larger than a house* is OK (unusual, but OK in a sci-fi movie), but it rules out a *giant hill larger than a mountain* (even though normal hills are already much larger than turtles), because the word *hill* includes in its meaning that it's smaller than a mountain, while the word *turtle* does not include anything in its meaning about its relationship in size to houses.

The Lexicon

For a native speaker, each word or expression in their language has a lot of information attached to it - for instance they know how to pronounce it, they know how it operates in the syntax, they know the variety of possible meanings it has and they know how it interacts with other words or expressions to change its meaning in certain circumstances. All of this information about words and expressions is stored in the *mental lexicon* of the speaker of the language. The lexicon is a store of all the relevant information about words and expressions that a person needs to know to be able to use them correctly to convey meaning.

This semantic information about each word or expression (also called a *lexeme*) is contained in the mental lexicon of each language.

Denotation versus connotation

When we talk about 'meaning' we are usually talking about something called *denotation*. Denotation is the literal meaning of a word or sentence.

When we say the word *dog* it denotes an entity in the world that we could refer to as 'a canine animal'. Denotation is the linguistic form's descriptive, or literal meaning.

As well as having a literal meaning, words or expressions can also have other meanings, other *connotations*. Connotation refers to the emotional associations, social overtones or cultural implications that are part of the meaning of a word or expression, over and above its purely descriptive content.

Words convey more than their exact, literal meanings - they *connote* or suggest additional meanings and values as well. Sometimes, because of usage over time, words that *denote* approximately the same thing they always did, may acquire additional meanings, or *connotations*, that are either positive or negative. Consider the changes undergone in the connotations of these words in the 20th century: liberal, diversity, right wing, follower, gay, minority, feminist, left wing, abuse, conservative, motherhood, extremist, rights, partner, harassment, family, propaganda, peacekeeper, and comrade.

Social meaning

Sometimes words or expressions also connote *social meaning*. The social meaning of a linguistic form is what that form tells the hearer about the social characteristics of the speaker - their class, level of education, gender, regional background, ethnicity and so on. For example, in Australia if I said to some friends, "Are yous gunna come with us, or what?" I would probably be considered 'rough' and assumptions might be made about my class or

education. It could make some people uncomfortable, but others may feel more comfortable with me.

There are a lot of social meaning connotations that can be made when we hear someone's speech - things like their age, gender, regional background, ethnicity or subculture.

Affective meaning
The affective meaning of a linguistic form tells the hearer about the *attitudes* of the speaker. It can tell you how they feel about what they are talking about, just by the words they choose. For example, choosing one or the other of these words shows a different attitude:

- *brave* vs. *reckless*
- *strong willed* vs. *pig-headed*
- *fat* vs. *well-built*
- *police officer* vs. *constable* vs. *cop* vs. *pig*
- *skinny* vs. *slender*

Factors such as stress and intonation can also show *affective meaning*. Sarcasm can be expressed just by using a different intonation:
Oh yeah, that was a really clever thing to do! (With two different intonation patterns.)

In any language, separating grammatical denotation from connotation is important because while you might understand a word's denotation, knowing a word's connotations and what they are intended for, is much more difficult to know. Connotations are often emotional in nature, and if they are intended, it could be for any number of purposes - to sway opinion one way or another, to communicate a personal identity, or to share a deep feeling.

If there are misunderstandings about how a person is using a particular word, a primary source of that misunderstanding might lie in the word's connotations: people might be seeing something not intended, or the speaker may be intending something people don't see. In cross-cultural communication, it's obviously extremely important not merely to look at what your words and other's words *denote*, but also what they *connote*.

Semantic relations

Polysemy and homonymy
This sounds complicated, but it actually isn't. Homonymy or polysemy just refer to the fact that one group of sounds can have more than one meaning.

Homonyms are unrelated lexemes that just happen to have the same form:
- *bank* (of a river) vs. *bank* (financial institution)

- *keep* (to retain) vs. *keep* (of a castle)
- *bow* (of a boat) vs. *bow* (bend forward) etc.

Homophones are homonyms that are pronounced the same, regardless of how they are written:

- *bow* (front of a boat) vs. *bough* (branch of a tree)
- *I* (me) vs. *eye* (that sees)
- *to* (towards) vs. *too* (also)

Homographs are homonyms that are written the same way, regardless of whether they are pronounced the same:

- *wind* (that blows) vs. *wind* (twist)
- *bow* (of a boat) vs. *bow* (for arrows)

Many homonyms are both a homophone and a homograph (*bank* and *bank* are both). *Wring* and *ring* are homophones but not homographs. *Bow* (of a boat) and *bow* (for arrows) are homographs but not homophones.

Polysemy involves a word that has more than one meaning, but they are different senses of the same word. A single lexeme may have several 'meanings', for example, *bank* can mean:

- a financial institution,
- a building,
- the dealer and distributor of money in gambling games,
- to deposit money in a financial institution,
- to depend on; etc.

Other examples are:

- *mouth*: *mouth* of a river, *mouth* of a person.
- *lose: lose* a football match, *lose* your keys

The lexical information for words such as *bank* contains information that this lexeme has several senses – various closely related and overlapping meanings that it can have.

An example of polysemy in Bengali is the word māthāy
1) chabiṭā ṭebiler **māthāy** rākho
"Keep the picture on the table"

2) tomār kathāṭā āmār **māthāy** āche
"Your word is in my mind"

3) tin diner **māthāy** tini phire elen
"He returned by the beginning of the 3rd day"

In the examples given above, the Bengali word māthāy, is used in three different senses: in (1), it means 'top of a table', in (2), it implies 'mind of a person', and in (3), it indicates 'beginning of a day'. In Bengali, these senses are concepts that are related in meaning, and māthāy is considered to be one lexeme that can be used to express many different senses (more than are illustrated in our examples here).

Antonymy and synonymy

Words or utterances that have the same meaning are **synonyms**. Some examples of synonyms are: *quick* and *fast*; *big* and *large*; *movie* and *film*; *rent* and *hire*. There are a lot of different reasons why certain synonyms are used and when they are used, here are some examples:

Synonyms may belong to different *registers* (they would be used by different people in different situations):
- *hubby* vs. *husband* vs. *spouse*
- *pet* vs. *companion animal*
- *grabbed* vs. *nicked* vs. *apprehended*
- *mouth* vs. *oral cavity*
- *tell* vs. *inform*,
- *police officer* vs. *cop*

Synonyms may have different *connotative* meaning (so people would choose the one that best expressed their meaning):
- *police officer* vs. *pig*
- *talked* vs. *droned on* vs. *enthralled*
- *brave* vs. *reckless*
- *swamp* vs. *wetlands*

Synonyms may be used in different *linguistic* situations:
- *rented/hired*: "They *rented/hired* a car", but "They *rented* a house", and "They *hired* a new receptionist".
- *pair/couple*: "a *pair/couple* of dogs", but "a *pair* of trousers", and "a *couple* of dollars".

Synonyms may have different *semantic* range:
- *boss and employer*: If you work in a small business your *boss* may also be your *employer*. In a large organization your *boss* may be a fellow employee who is your manager, while your *employer* is the organization, which you would not refer to as your *boss*.

Synonyms may have different *dialectal* or *sociolectal* distribution (they may be used in different regions or by different groups in society):

- *footpath* vs. *sidewalk* vs. *pavement*
- *couch* vs. *sofa* vs. *settee* vs. *lounge*
- *chap* vs. *fellow* vs. *bloke* vs. *dude*
- *gun* vs. *piece* vs. *weapon* vs. *sidearm*

Words or utterances that have the *opposite* meaning are **antonyms**. Some examples of antonyms are: *quick* vs. *slow*; *big* vs. *small*, *hot* vs. *cold*.

Some antonyms are *complementary*, which means they are absolute and mutually exclusive and mean the exact opposite of one another.
- *alive* vs. *dead*
- *married* vs. *unmarried*
- *hit* vs. *miss*

One rules out the other - if something is *alive*, that means that it is *not dead*. So, part of the meaning of *dead* is '*not alive*'. We could say that a pair of complementary antonyms exhausts the full range of possibilities - something is either one or the other.

But, some antonyms are *gradable* antonyms. These are antonyms but they have shades or degrees of meaning between them:
- *big* vs. *small* (A mouse might be big in relation to a flea, but small in relation to a cow)
- *new* vs. *old*
- *hot* vs. *cold* (A cup of coffee is hot compared to ice but cold compared to magma. A cup of coffee can be a bit hot or not very hot. One cup of coffee can be hot, another hotter, and yet another the hottest)

Some words have opposite meanings that are *reverses*:
- *push* vs. *pull*
- *increase* vs. *decrease*

Some pairs of words have *converse* meanings. These kinds of words are '*converses*' or '*relational opposites*':
- *mother* vs. *daughter* (If Linda is Dania's *mother*, then Dania is Linda's *daughter*)
- *buy* vs. *sell* (If Paul *sells* the car to Bob, then Bob *buys* the car from Paul)

Some individual words have their own converse meanings too:
- *rent* (If Jim *rents* a house to Simon, Simon *rents* the house from Jim).

Metaphor

We saw that with *polysemy*, one word (one lexeme stored in our minds) can have several closely connected meanings. But there is another possibility if a word seems to have two meanings: it could be that one of the meanings is the literal (or 'real') meaning, and the other is using the word to refer to something else, knowing that it is not really what we are saying. This second kind of use is a *metaphor*. Let's look at some examples.

*A **wave** of emotion **swept over** him.*
We all know what a *wave* is ('a moving wall of water'), and what *swept* means, and what *over* means. But when we say that sentence, we don't mean that a wall of something moved
across the top of the person. A metaphor is simply using a word that means one thing to refer to something else. We use metaphors because we want to suggest that in some way it is like the thing it normally refers to. A wall of water in the ocean is something bigger than us that we can't control, and emotion can be that way as well, so we use the metaphor of a sweeping wave to express that idea of helplessness.

*An idea **hit** him.*
We don't mean the idea punched him. We mean that when he thought of the idea, he thought of it suddenly, and it had a big impact on him – that thinking of it was in some ways a bit like being punched – it had suddenness and impact.

Some metaphors are so commonly used that we don't even notice them. For example we often say, "*I see what you mean.*" Using *see* to mean '*understand'* is so common in English that we don't even notice it as a metaphor - there are many of these in English.

Metaphors don't need to just involve individual words. They can be organised into whole lexical domains (or areas of meaning), where one area is used to talk about another. One example of this is talking about *time* as if it was *money*:
     You're wasting my time.
     Is that worth your while?
     This gadget will save you hours.
     He's living on borrowed time.
     How do you spend your time?
     You don't use your time profitably.
     You need to budget your time.

Another example is talking about *ideas or plans* as if they involved *cooking*:

He's full of half-baked ideas.
We've got that one on the boil.
What scheme are you cooking up?
They put that plan on the backburner.

Metaphors are cultural

Metaphors reflect cultural perspectives, and different cultures use different *metaphorical domains.* For example, English treats the *heart* as the place in the body where emotion is:

He has a lighthearted attitude to life.
The news left him with a heavy heart.
They offered their heartfelt thanks.
He's got a good heart.
He's a brave hearted fellow.
They were heartbroken.

In many other languages emotion is located in the *stomach* (sometimes in the *liver*). For example in Ata (Papua New Guinea):

- opoleli tu'umaxu (*my stomach is heavy* - 'I am sad')
- oponu ukunikuni (*his stomach is trembling* - 'he is afraid')
- opoleli laixe (*my stomach is good* - 'I am OK, at peace')
- muto'omolu oponu (*it speared his stomach* - 'it convicted him')

Metaphors of space and time

An important source of metaphor involves *spatial* terms, and terms for physical space are used as metaphors for many things.

One important example is *space* as a metaphor for *time*. In some languages the future is treated as in front and the past as behind.
Some examples in English:

I'm looking forward to the weekend.
They're looking ahead to next year.
He looked back over his life.
They don't foresee any problems.
The rest of your life is ahead of you.
Put the past behind you where it belongs.
Tuesday comes after Monday, and before Wednesday.

Time is treated like a path you are travelling along: as you walk along a path, the part of the path you have not reached yet is physically in front of you. The part of the path you have already walked along is physically behind you.

In some other cultures it's the opposite. The past is thought of as in front of us and the future as behind us. This might be hard to get your mind around because you have grown up using another metaphor to speak and think about

time, but in some languages, '*ahead'* is a conventional metaphor for past, and '*behind'* for future. For example, in the Gurindji language (Northern Territory):

- kamparri-jang (*ahead/front*) means 'old, previous'
- ngumayi-jang (behind) means 'young(er), future'

This metaphor is difficult for us to understand but it makes sense to the Gurindji. It seems to be based on a scenario of travelling - those that are ahead have already been here; those behind have yet to reach here.

Taxonomies

Semantic Relations such as antonymy and synonymy refer to the relationships between the stored meanings of words in the lexicon.

There is another set of relations we have not looked at yet. The meanings of words group together into *lexical fields*. This is a little complex at first, but it is important to understand as it can be very different in different languages. Let's look at some examples: *Pig*, *cat*, *lion*, and *echidna* have meanings that relate to each other because they all belong to the same lexical field ('*animals'*).

We are going to use some new terminology here so we can talk about lexical fields and the way they work. Don't worry about memorising the specific terms - the main goal is for you to understand the concept of areas of meaning, and how they work. Basically words group together in different areas and levels of meaning. We will also be drawing diagrams to make it easier to understand.
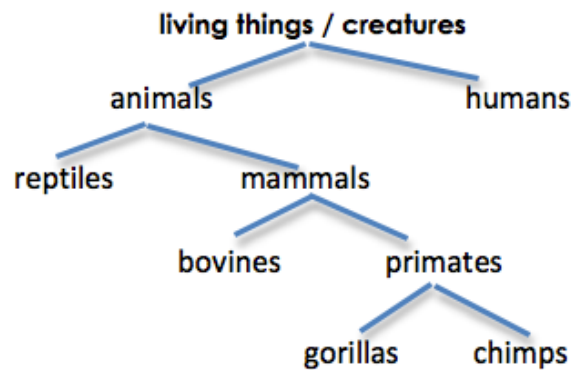
The *superordinate* for *pig*, *cat*, *lion*, and *echidna* is 'animal'. Each term in a lexical field is a *hyponym* of the superordinate, so - *pig* is a hyponym of *animal*. The hyponyms of a single superordinate are *sisters* of each other, so - *pig*, *cat*, *lion*, and *echidna* are sisters.

A word can be a hyponym of one word, but the superordinate of another - *dog* is a hyponym of *animal*, but is itself the superordinate for *labrador*, *poodle*, *blue heeler,* etc.

As you can see, word meanings form complex hierarchical sets of relations called *taxonomies*. Here is an illustration of the one we have been talking about above:
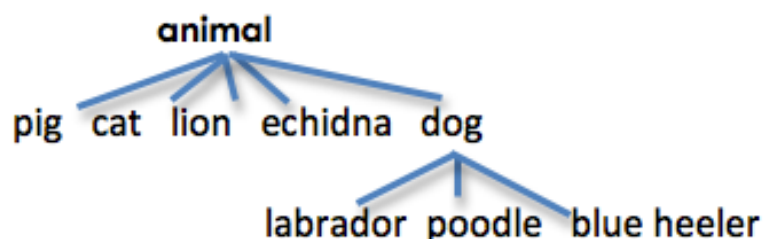
A single word can fit into several different taxonomies in different ways. For example, if we think of a distinction between humans and animals we might draw a taxonomy like this:

living things / creatures
- animals
  - reptiles
  - mammals
    - bovines
    - primates
      - gorillas
      - chimps
- humans

Those who make no distinction, might consider humans as a type of primate and would draw a different taxonomy:

animals
- reptiles
- mammals
  - bovines
  - primates
    - gorillas
    - chimps
    - humans
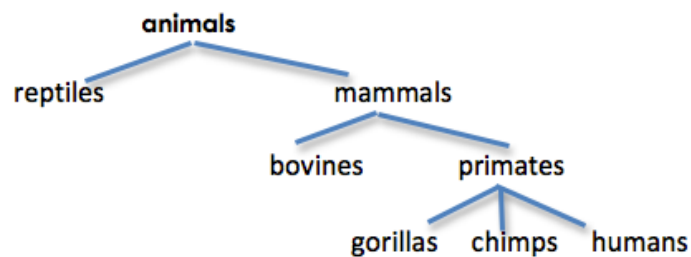
Taxonomies are cultural. Different cultures divide up the world differently. For example, in English, we would consider *bird* and *bat* to be separate taxonomies, with *chicken*, *pigeon* and *parrot* under the superordinate *bird*. But *fruit bat* and *vampire bat* we would not consider in that group. However in Kokota (Solomon Islands): *memeha* is the superordinate for the taxonomy that includes all of these:

kokorako *'chicken'*
balhu *'pigeon'*
makara *'parrot'*
meruku *'fruit bat'*
bablata *'insectivorous bat'*

ACTIVITIES
Semantics 1

1. Are the following polysemy or homonymy?
   - bark (of a dog / of a tree)
   - steer (to guide / young bull)
   - fork (in road / instrument for eating)
   - lip (of jug / of person)
   - tail (of coat / of animal)
   - punch (fruity drink / blow)
   - mouse (on computer/animal)
2. Are the following examples of gradable antonyms? (A good test is to see if they can be combined with intensifiers such as very, very much, how, how much. If so, they are probably gradable antonyms.)
   - big-small
   - top-bottom
   - long-short
   - love-hate
   - clever-stupid
3. Are the following complementary pairs?
   - chalk-cheese
   - dead-alive
   - same-different
   - married-unmarried
   - copper-tin
   - love-hate
4. Are these examples of relational opposites (converses)?
   - below-above
   - conceal-reveal
   - grandparent-grandchild
   - greater than-less than
   - love-hate
   - own-belong to
5. Describe as clearly as you can what the metaphors in the following verses mean.
   - Psalm 18:2 - "*The LORD is my rock, my fortress, and my savior; my God is my rock, in whom I find protection. He is my shield, the power that saves me, and my place of safety.*"
   - John 6:35 - "*Jesus replied, "I am the bread of life. Whoever comes to me will never be hungry again. Whoever believes in me will never be thirsty.*"

- o John 10:9 - "*Yes, I am the gate. Those who come in through me will be saved. They will come and go freely and will find good pastures.*"
- o James 3:6 - "*And the tongue is a flame of fire. It is a whole world of wickedness, corrupting your entire body. It can set your whole life on fire, for it is set on fire by hell itself.*

(Answers below)

Answers:

1. Polysemy or homonymy?
   - o bark (of a dog / of a tree) **homonymy**
   - o steer (to guide / young bull) **homonymy**
   - o fork (in road / instrument for eating) **polysemy**
   - o lip (of jug / of person) **polysemy**
   - o tail (of coat / of animal) **polysemy**
   - o punch (fruity drink / blow) **homonymy**
   - o mouse (on computer / animal) **polysemy**
2. Gradable antonyms?
   - o big-small **gradable**
   - o top-bottom
   - o long-short **gradable**
   - o love-hate **gradable**
   - o clever-stupid **gradable**
3. Complementary pairs?
   - o chalk-cheese
   - o dead-alive **complementary**
   - o same-different **complementary**
   - o married-unmarried **complementary**
   - o copper-tin
   - o love-hate (not complementary: just because you don't love something, you don't have to hate it)
4. Converses?
   - o below-above **converses**
   - o conceal-reveal
   - o grandparent-grandchild **converses**
   - o greater than-less than **converses**
   - o love-hate
   - o own-belong to **converses**
5. Describe as clearly as you can what the metaphors in the following verses mean.

Answers will vary. The metaphors used are describing something or someone in terms of another thing, and by doing so, are attributing properties or characteristics of that thing to the one they are describing:

o Psalm 18:2: The Lord is referred to as a rock, fortress and shield - all of these things have the properties of strength and being able to be a protection from danger. The Lord is an impenetrable barrier against spiritual harm and is able to stand up to any danger.
o John 6:35: Jesus is referred to as the bread of life. The metaphor goes on to imply that only He can satisfy spiritual hunger and thirst, and that if He is the one to satisfy it, that it will not constantly return like physical hunger and thirst.
o John 10:9: Jesus talks about Himself as the gate - referring to a gate of a sheepfold where a good shepherd would sleep to protect the sheep during the night. In this case He says He is the gate where people enter to be saved (through Him only can people be saved), and then that they can come and go freely to find good pasture (that people have true freedom once they are saved because of His perfect payment for their sin).
o James 3:6: The metaphor uses fire because of the quality it has of getting out of control and running away from the person who thought they were controlling it. The warning is that people can think they are in control of the things they say, but if they are not careful and thoughtful, that the things they say can get out of control (be misunderstood or passed on by others and do great harm). Also, the things you say can bring harm to yourself also by ruining your life and thinking.