TUTORIAL
5.16

Semantics 2

This tutorial continues to discuss Semantics. The last tutorial focused on the relationships between the meanings of words, but in this one we will look more specifically at sentences, and the implied meaning in sentences.

Introduction

As well as the meanings of individual words and expressions, semantics also involves the relationship between the meanings of sentences, and other pieces of meaning you might not actually be saying, but which might be implied in a sentence. A meaning that is asserted or implied in a sentence is called a *proposition*.

In this tutorial we will be discussing the relationship between propositions, and looking at some examples in English and in other languages.

Propositions

Propositions are always either true or false – we say that they have a truth-value. For example, *Sydney is a large city in Australia* is a proposition, and it has the truth-value of being true. Another proposition is: *Sydney is a city in Mexico*, and it has the truth-value of being false.

Some propositions have a meaning that requires that something *else* is also true or false - so if Proposition A is true, then Proposition B must also be true, and at the same time, if Proposition B is true, then Proposition A must also be true. For example,

> *That apple is in front of the oranges.*
> *Those oranges are behind the apple.*

If it's true that the apple is in front of the oranges, then it must also be true that the oranges are behind the apple. To say that the oranges are behind the apple entails that the apple is in front of them, and vice versa. We call this *entailment* - it describes the relationship between these kinds of propositions.

Sometimes the entailment only works one way - for example:
> *I own a dog.*
> *I own a pet.*

If Proposition A is true, then Proposition B must also be true, but if Proposition B is true, that doesn't necessarily mean that Proposition A is also true. To say I own a dog entails that I own a pet, but to say that I own a pet does not entail that I own a dog - my pet might be an anaconda or a kitten.

Entailment is just one way in which propositions relate to one another in their meaning. Let's look at another meaning relationship that involves propositions.

Presupposition

Think about the following proposition:
> *The Prime Minister of Australia in 2012 was a woman.*

It is easy to determine the truth-value of this proposition – it's true. But what about:
> *The King of New Zealand in 2012 was of Maori heritage.*

We say that this proposition has no truth-value – it's neither true nor false - because it is based on a *presupposition* that isn't valid.

The proposition about the Australian Prime Minister has truth-value because there *was* an Australian Prime Minister in 2012 - so we say it has a valid presupposition. But the proposition about the New Zealand King has no truth-value - it is based on a presupposition that is not valid - because there's no position of 'King of New Zealand', not yet anyway.

Each of these propositions involves a *presupposition*. To say *the New Zealand King is Maori* presupposes that there is a New Zealand King. If we say it's true, we are also accepting that there is a New Zealand King, but if we say it's false, we're still accepting that there's a New Zealand King (but that he's of some other ethnicity). So, to say the New Zealand King is *not* Maori presupposes there is a New Zealand King, just as much as the positive proposition.

So, statements can have presuppositions - but other sentence types like questions can also. For example: *Do you like the current King of New Zealand?* You can't answer yes or no, because the question involves the presupposition that there is a current NZ king, and that presupposition is not valid.

Presuppositions are very powerful. Lawyers in court are supposed to be careful not to ask people questions that have dangerous presuppositions, like;
> *Have you stopped forging your employer's signature?*

If you answer yes, you are accepting the presupposition that you used to forge your employer's signature, but if you answer no, you are admitting you are still doing it!

Context

It is probably an obvious thing to say, because we all know that a lot of the meaning in words and sentences depends on the *context* of the things being said. If someone says to you;

> "*Find out first and then come back tomorrow, and buy another one of those.*"

What are you supposed to find out? Where are you meant to come back to? When? And what are you supposed to buy? The only way you can understand that sentence is if you know the context - who is speaking, what they are talking about, etc.

To understand the meaning of a lot of sentences you need to know about the speech event - the event of the words themselves being said. Linguists call this kind of meaning *deixis* - which is simply the meaning that depends on knowledge of the time and place and participants in the speech event.

There are three main kinds of information about context that are important to the meaning of speech: *the personal context*, *the physical context* and *the time context*. The *social context* also is important to meaning. We will look at some of the things in language that indicate personal information first.

The Personal Context

Person and number

To understand the meaning of what someone is saying, one of the first things you need to know is who the speaker is and also who they are talking about. Pronouns are the main way that this personal context is made clear.

Pronouns distinguish categories of *person*, and usually also of *number*:

- <u>First person</u> refers to the speaker or any group including the speaker.
- <u>Second person</u> refers to the addressee or a group including the addressee.
- <u>Third person</u> refers to anyone or anything not including the speaker and/or addressee.

In English we have three *person* categories and two *number* categories (except in second person where there is no number because there is no singular and plural):

First Person	Second Person	Third Person		
		Masculine	*Feminine*	*Neutral*

Singular	I, me, my, mine	you, your, yours	he, him, his	she, her, hers	it, its, their
Plural	we, us, our, ours		they, them, their, theirs		

It is important to know that many languages don't work the same way as English in person and number - how they communicate who is talking and who they are talking about.

A lot of languages have *four person categories*, because they have an extra first person category. They have one first person category that includes the speaker and others but *not* the person they are talking to (first person exclusive) and another one that includes the speaker and others *as well as* the person they are talking to (first person inclusive).

English doesn't make this distinction, so when someone says to you, "We are going to the beach", they could mean that the trip to the beach includes you - the person they are talking to - or they might be talking about a group that doesn't include you. The *we* in English doesn't make it clear. However in the Wajarri (Aboriginal, Western Australia) language, you would always know if you were included in the beach trip or not because the speaker can indicate that by the pronoun he uses (first person inclusive or exclusive):

	First Person (Inclusive)	First Person (Exclusive)	Second Person	Third Person
Singular	ŋaja	-	nyinta	palu
Dual	ŋali	ŋalija	nyupali	pula
Plural	ŋanyu	ŋanju	nyurra	jana

You may have noticed that Wajarri also has an extra *number* category as well - Dual. The dual number category shows they are talking about two people - many languages have this dual category. Some languages also distinguish *trial* (three), or *paucal* (a few - more than two but not many) in their pronouns.

Standard Fijian uses four person categories and four number categories:

	First Person (Inclusive)	First Person (Exclusive)	Second Person	Third Person
Singular	yau	-	iko	koya
Dual	keirau	kedatu	kemudrau	rau
Paucal	keitou	kedatou	kemudou	iratou
Plural	keimami	keda	kemuni	ira

Case and Gender

Pronouns can also distinguish *case* - which indicates if the person being spoken about is the subject or the object of the sentence. They can also distinguish *gender* - masculine or feminine.

In English "*I*" is the first person singular pronoun if the speaker is the *subject* of the sentence, but we use "*me*" (still first person singular) if the speaker is the *object*; and we use "*mine*" (also first person singular) if the speaker is the possessor. This ability of English pronouns to distinguish in this way is called *case*. Not all languages have case - many just use the same pronouns regardless of case, like Fijian.

You would have seen in the table of English pronouns above, that we distinguish three categories of *gender*, but only in third person singular - masculine, feminine and neutral. French only distinguishes two gender categories, and again only in third person singular. Some languages distinguish gender in other person or number categories as well. For example, Arabic also distinguishes gender in second person singular, second person plural and third person plural.

As we have seen, all languages use pronouns to make it clear who is speaking and whom they are speaking about - but they work in different ways to communicate this personal context. Next we will see how languages indicate other important information about the context of what is being said.

The Physical Context

There are indicators in languages that help to locate an event or object in physical space and we will be looking at some examples of these below. The actual speech context - where the thing is being said - also adds to the *physical context* of a sentence.

Directional verbs

Some verbs of motion have locative meanings. *Come* means, 'move towards the location where the word *come* is uttered'. *Go* means, 'move away from a location' - the default location is the location where the word *go* is uttered.

Spatial adverbs

There are also locative adverbs (adverbs of location) that tell us things about physical location. *Here*, refers to a location near the place where it is uttered. *There,* refers to a location away from the place where it is uttered. Many languages have more locative adverbs than English. Some examples are

Southern Sotho (Niger-Congo) which distinguishes degrees of distance with its locative adverbs.

'here' (near the speech event)	'there' (a little way away from the speech event)	'there' (a long way away from the speech event)
seē	seō	sanē

Japanese has three types of locative adverbs that relate to the person speaking and also to the personal context:

'here' (near the speaker: 1st person)	'there' (near the one being spoken to: 2nd person)	'there' (away from the speech event: 3rd person)
koko	soko	ano

Some languages distinguish many more than three categories of distance. Some combine both distance-based and person-based dimensions, like Hausa (Afro-Asiatic):

'here' (near the speaker)	'there' (near the one being spoken to)	'there' (a little away from the speech event)	'there' (a long way away from the speech event)
nân	nan	cân	can

Other languages have much more complex systems that include elements of relative height; relationship to directions of rivers or locations of coastlines; movement away from or towards; and other factors. The Ata language (spoken by people who live along narrow river valleys in the mountains of PNG) commonly uses the locative adverbs - *to'o* and *nuna* ('upstream' and 'downstream'), relating the direction to the flow of the river which is a constant reference point in their world.

Demonstratives
Demonstratives refer to things and where they are in relation to the location of speaking - we have two demonstrative categories in English:

	(near the speech event)	(away from the speech event)
Singular	'this'	'that'
Plural	'these'	'those'

Some languages distinguish more demonstrative categories, like Tlingit (Alaska):

'this' (near the speaker)	'that' (near the addressee)	'that' (a little way away)	'that' (a long way away)
yaa	hei	wee	yoo

Other languages have *even more* categories, like Kokota (Oceanic, Solomon Islands) which has five distance categories:

	'this' (touching)	'this' (within reach)	'that' (nearby)	'that' (visible)	'that' (not visible)
Singular	ao	ine	ana	iao	-o
Plural	aro	ide	are	iaro	-ro

The Social Context

Some languages have ways of expressing a relationship with the speaker that is not in space or in time, but in society. For example, some European languages have second person pronouns that distinguish social distance from the speaker. In German, the more familiar way to say 'you' is *du* (singular) or *ihr* (plural). However, if you are being more polite or formal you would use *Sie* (both singular and plural).

Some East Asian languages express the complex social hierarchies that exist in those cultures. For example, Javanese (Austronesian, Java) has different first person singular and second person singular pronouns depending on whether the speaker is higher in the social hierarchy than the addressee, or on the same level, or lower:

Addressee is:	First person singular	Second person singular
much higher	daləm	pandzənəʼan
a bit higher	kulo	sampejan
not higher	aku	kowe

The way these terms interact is very complex. Javanese social distance requires the use of many completely different words for the same meaning - depending on their social status compared to the speaker. This feature of the

language reflects the great importance that is placed on social status in the Javanese culture.

The Time Context

There are words and phrases that we use to locate events in *time*, in relation to the moment of the speech event. Some of these in English are:

- *now* means roughly at the time the word *now* is said,

- *then* means at a time other than when the word *then* is said,

- *tomorrow* means the day following the day when the word *tomorrow* is said;

- *last week* means the week before the week during which the phrase is said.

Tense

You have probably heard of tense - it is a grammatical system of locating events in time in relation to the moment of speaking. *Past tense*, like in the word 'walked', locates the event of walking some time before the moment of speaking.

Different languages differ quite a bit in the way they express tense. Many languages (like Fijian and Hindi), have three tenses, *past*, *present* and *future* - but some languages have no tense system at all, like Thai and Vietnamese. Many languages have only two tenses - if a language has only two tenses it almost always distinguishes *past* vs. *non-past*. Japanese is a language with two tenses.

Many languages have more than one past tense. Some languages have more than one future tense. An interesting fact is that languages *never* have more future tenses than past tenses.

Some languages distinguish many tenses. For example, Rotokas (Bougainville) has four past tenses and two future tenses:

Aio-ri-va.	'You ate (long ago).' *remote past*
Aio-ri-vora.	'You ate (some time ago).' *distant past*
Aio-ri-vorao.	'You ate (not long ago).' *near past*
Aio-ri-vo.	'You ate (just now).' *immediate past*
Aio-ri-voi.	'You are eating.' *present*
Aio-ri-vere.	'You will eat (soon).' *near future*
Aio-ri-verea.	'You will eat (a long time from now).' *distant future*

Tense in English

Many people agree that English has only two tenses: past and non-past (like Japanese). Past is marked with a past tense marker, the suffix *–ed* (walk, walked). Non-past is unmarked - there are no separate present and future tenses in English.

The auxiliary word *will,* often functions like a future tense marker. But often when we are talking of the future, we do not use *will*, but use another auxiliary word instead:

He *will* arrive tomorrow.
He *might* arrive tomorrow.
He *should* arrive tomorrow.
He *can* arrive tomorrow.
Many future references even use the simple non-past:
He**'s** arriving tomorrow.
He arrive**s** tomorrow.

➡ ACTIVITIES
Semantics 2

1. The following sentences have certain presuppositions, even if the situation isn't completely known. What are they?
   o Frank saw the horse with two heads.
   o Johannes Piper died in misery.
   o Stephanie began planting trees.
   o What Jan lost wasn't her handbag.
   o Even Claudio could solve that problem.
2. For each of the sentences below (marked A), state which of the accompanying statements (marked B) show entailment (i.e., if A is true, then B must be true).

   A: Mr Green stole the Mona Lisa this morning.
      B: Mr Green stole something.
      B: Something was stolen this morning.
      B: Mr Green believes the Mona Lisa is valuable.

   A: Who stole the Mona Lisa this morning?
      B: Mr Green stole something.
      B: Something was stolen this morning.

   (Answers on next page)

Answers:

1. Presuppositions:

Remember that presuppositions are things that are assumed by the speaker to be already known to the addressee.
- Frank saw the horse with two heads >> There exists a horse with two heads.
- Johannes Piper died in misery >> There is some individual named Johannes Piper.
- Stephanie began planting trees >> Stephanie had not been planting trees before.
- What Jan lost wasn't her handbag >> Jan lost something.
- Even Claudio could solve that problem >> Claudio is the last person you'd expect to be able to solve the problem.

2. Entailment:

A: Mr Green stole the Mona Lisa this morning.
   B: Mr Green stole something. **Yes**
   B: Something was stolen this morning. **Yes**
   B: Mr Green believes the Mona Lisa is valuable. **No**
A: Who stole the Mona Lisa this morning?
   B: Mr Green stole something. **No**
   B: Something was stolen this morning. **Yes**