Introduction to Semantics and Pragmatics

Class 3 – Semantic Relations
Semantic Structure and Semantic Choice

Semasiological structures – polysemy and types of polysemy
Onoasiological structures – synonymy and types of synonymy

We have seen how semantic structure can be understood from two perspectives
The signifiés associated with a signifiants – choices between what you mean
and
The signifiants associated with a signifié – choices of how you say that
Semantic Choice

What do you want to say?
How do you choose to say it?

When you speak
You are making thousands of choices
every second
semasiological and onomasiological choices

but also
syntagmatically and paradigmatically...

No, Grandma, Listen, Double-Click The Chrome Icon
A philosophical question to think about
To finish the broad semiotic questions

Intension vs. Extension
It is a fundamental notion in philosophy

Intension – is the meaning you have in your mind that you try a symbol (sign)
Extension – is the possible referents it has in the world

Without going into details, one last time, think about the complexity of this question...
So far, we have looked at the complexity of communication

1. Sign Theory – what goes on when we communicate
   - no meaning in a word
   - complexity of onomasiological (word choice)
   - complexity of semasiological (meaning choice)

How does the semanticist deal with all of this?
How can we describe semantic structure?
How can we explain how we do this?
TYPES of Semantic Relations

Semantics describes meaning by breaking into down into
types of sense relations
and
sets of semantic features

This week, we look at semantic relations
it’s tough, but you will survive
next week, we look at semantic features
Part 1 - Dimensions of Semantic Choice

Syntagmatic Sense and Paradigmatic Relations

Paradigmatic relations reflect the semantic choices available at a particular structure point in a sentence.

For instance:
I'll have a glass of —
   beer
   wine
   water
   lemonade
   etc.

It is the choices you make at a given point in a sentence

Typically, paradigmatic relations involve words belonging to the same syntactic category (Part of speech), although not infrequently there are minor differences

John — across the field I'd like a glass of — sherry.
   ran
   walked
   crawled
dry
sweet
warm
Syntagmatic Sense Relations and Paradigmatic Sense Relations

Syntagmatic relations hold between items which occur in the same sentence, particularly those which stand in an intimate syntactic relationship. For instance,

(a) I'd like a glass of dry sherry
(b) I'd like a glass of striped sherry

because of syntagmatic sense relations between the adjective and the noun (a) is correct and (b) is not
Part 2 - Semasiological Sense Relations

Think about what is meant by semasiological relations

Homonymic – no relation

Polysemic Extension
  - Literal
  - Metaphor
  - Metonymy
Homonymic sense relations

The same form, but totally unrelated meanings

bank

Not very interesting for us....

But are these meanings unrelated?

On your phones or computers, check the etymology of bank
Exercise - Homonyms

Two subtypes: homophones & homographs

Homographs are even less interesting than homophones.
From their names, can you work out what they are?

Homophones are a problem for learners in French because there are so many.
   Can you think of 3 homophones in French?
Semasiology - Polysemic Sense Relations

Polysemy! - *over*

The veil is over the face (in front of)  The argument is over money (because)
The ball is over the fence (behind)    He is over the problems (finish)
The car is over the hill (beyond)     He said it over (again)
The bird is over her head (above)     He is over this weekend (visiting)
The cloth is over the table (on)      It is over 10 minutes (more than)
I reached over the table (across)    
I bend over (fold)                   
I roll over (turn)                   
He is over there (distance)         
He said it over the weekend (during)
Polysemy vs. Vagueness vs. Monosemy

Polysemy – many senses
Monosemy – single sense
Vagueness – something in-between the two

How do we identify instances of polysemy?

Is the lexeme *drôle* polysemous?
Polysemy vs. Vagueness vs. Monosemy

The semasiological structure of the lexeme *drôle*

Consider the following examples

1. Ha ha ha, ça c’est très drôle! Tu te moque de moi toujours.

2. C’est un drôle de type celui-là. Il me regarde jamais quand il parle.
Polysemy vs. Vagueness vs. Monosemy

Three methods for determining polysemy

Definitional Test

*drôle:* (a) amusing  
(b) peculiar

But!!!
why not just say that these two meanings are vague differences, determined by context of one more general meaning?

For example, just like in French, English has a lexeme that covers the two “meanings”

*drôle:* (a) funny
**Polysemy vs. Vagueness vs. Monosemy**

It is very possible that we could write a better definition that covers both “meanings”

*drôle:* (a) something that contrasts with the norm to humorous, uncomfortable, or annoying effect

In this definition, you see the problem. This one definition covers all situations where it can be used. In one context:

(1) C’est un drôle de type celui-là. Il me regarde jamais quand il parle.

the lexeme *drole* could refer to a concept that makes the person laugh, uncomfortable or annoyed!!

Is this the meaning of the word or context or both that change?

.... the definitional test does not work
Polysemy vs. Vagueness vs. Monosemy

Logical Test

There exists a theory of semantics called Formal Semantics, which seeks to use Truth Value and Logic to describe language.

If you can introduce a juxtaposition which does not make the sentence “untrue”, then you have two meanings.

For example:

(1) This man is a minister (‘priest’), not a minister (‘politician’).

(2) The exam paper was hard (‘difficult’), not hard (‘firm to the touch’).

BUT

The problem is that many things which are clearly not polysemous pass this test:

(3) He’s trying (‘going through the motions’) but he’s not trying (‘making a genuine effort’).

(4) He’s an adult (‘mature’) but not an adult (‘legally adult’).
Polysemy vs. Vagueness vs. Monosemy

Logical Test – Exercise
In Groups, try to create a logical test for 2 senses of the preposition over and 2 senses of the adverb over

Preposition
The veil is over the face (in front of)
The ball is over the fence (behind)
The car is over the hill (beyond)
The bird is over her head (above)
The cloth is over the table (on)
I reached over the table (across)
I bend over (fold)
I roll over (turn)
He is over there (distance)
He said it over the weekend (during)

Adverb
The argument is over money (because)
He is over the problems (finish)
He said it over (again)
He is over this weekend (visiting)
It is over 10 minutes (more than)
Polysemy vs. Vagueness vs. Monosemy

Linguistic Test

We can add “and so is/are” to two propositions. If it sounds odd, then we can say that we have two meanings.

For example
(1) The quartet are playing, and so is Edith Piaf.
(2) Real Madrid are playing and so are Manchester.
(3) ?? The quartet are playing, and so are Real Madrid.

BUT

court has two meanings

court
   a. courtiser
   b. aller vers
(4) Ahmed is courting Tina and a disaster
Polysemy vs. Vagueness vs. Monosemy

Linguistic Test – Exercise

In Groups, take the lexeme *run* in English

1. Using your knowledge of English and a dictionary (one of you will have one on a phone or something), find 5 clear meanings of the lexeme *to run*

2. Can you make a linguistic test to distinguish at least two of them?
Polysemy vs. Vagueness vs. Monosemy

Many, if not most, linguists today believe that there is a continuum between true Polysemy and true Monosemy.

Instead of polysemy *per se*, we can talk about semasiological variation.

Modern methods of analysis permit us to see different meanings,
not as reified discrete categories
but as multidimensional clusters of features.
!! Why is this important??

Every time we speak, we are choosing between not only words, but between meanings – we must, in order to choose the words!!

Every time we understand, we are choosing between different meanings – we must, in order to understand the words

Why do we care?
1. Scientific desire to understand the world
2. Automatic translation
3. Artificial intelligence
   even, perhaps,
4. Better dictionaries
Types of semasiological / polysemic relations

All polysemy, all differences in meaning of a lexeme, are of three types.

Theoretically, these types are cognitive differences, three possible ways of conceiving the world for a human

Genersalised - Literal extension
more or less the same concept

Contiguous - Metonymic Extension
a subpart of the concept

Comparative - Metaphoric Extension
a concept that is similar to another concept
Polysemic Sense Relations

Literal Extension (vagueness)
The dog’s chair
(remember, every tree is different!)
Polysemic Sense Relations

Metonymic extension
To chair the meeting
Polysemic Sense Relations

Metaphoric extension
He is the university chair
Polysemic Sense Relations

Metaphoric-metonymic extension
Be careful of etymology

The Faculty chair comes from Latin *catedra* not directly from *chair* that we sit on

Indeed, in many European languages, the word *catedra* is the word for faculty.
Exercise – this one will be difficult

Let us go back to *over*.

In groups, think of 5 meanings of *over*
are they literal, metonymic or metaphoric extensions
Part 3 - Onomasiological Sense Relations

Synonymy
Antonymy
Meronymy
Hyponymy
What is the difference between

good and bad?

cat and dog

table and tree

table and furniture

table and bench

table and dining table

table and tabletop

glass and glass of wine
Synonymy - Revision

similarity between words

It is rare (arguably impossible) that any two words are exactly the same but words like

*table* – flat topped furniture at which you eat, but sometimes work

*bench* - flat topped furniture at which you work, but sometimes eat

are very similar

but what about *desk*?
Synonymy – Paradigmatic Relations
Let’s look at the lexeme über babe

It has many near-synonyms
What about girl, chick, babe, über babe, chicka, lass, sheila, woman, lady, maiden, mademoiselle?

Are they all paradigmatically inter-changeable?

John bought a pin up of an ____________
Synonymy – Paradigmatic Relations
Exercise

Are the nouns *lust, passion, desire, love, devotion, adoration, adulation*– are they synonyms?

In groups, invent a sentence where you can exchange these lexemes

Does it change the meaning of the sentence?
Antonymy

The antonymy of synonymy is antonymy – the opposite word

so good and bad, black and white

but what about

husband - wife?

heavy - light
Complementary (non-gradable) Antonymy

These are complete opposites

\textit{dead - alive; occupied – vacant}

Traditionally, these are considered Non-Gradable

You are either dead or alive, it is occupied or vacant!

but note, the effect of polysemy

\textit{Man, I was half-dead when I got home last night}

Why is it that this example does not disprove the Non-gradable antonymic relation between

\textit{dead and alive}
Exercise – Complementary Antonymy

In groups

1. Find 3 complementary antonyms in French
2. Are these 3 concepts also complementary in other languages people in your groups know.
3. Consider the sentences below:
   - John is more man than Hamish
   - Beethoven is more dead than Kurt Cobain

How is this possible? What semantic relation would help us explain why it is possible?
Gradable Antonymy

Things that are opposite but on a continuum

*big* - *small*; *hot* - *cold* etc.

This is so easy, I can’t think of an exercise

but....

**Question 1:** Does the lexeme *hot* in *hot day* and *hot kettle* mean the same thing? If not, is this polysemy?

**Question 2:** Does the lexeme *hot* in *hot babe* and *hot day* mean the same thing? If not, what type of polysemy is it (literal, metonymic, metaphoric)?

**Question 3:** What is the antonym of *hot babe*? Can you make a gradable antonym of the lexeme?
Relational Antonyms

Table and chair,
knife and fork...
husband and wife...

When you think of one,
you think of the second in contrast

what about husband and son?
Exercise - Relational Antonyms

In groups
1. Find three relational antonyms.
2. Are the same in other languages that you speak.
3. Do you think they are universal?
4. What about husband and son, wide and daughter....?
Hyponymy and Meronymy

This bit is even easier :)

Meronymy
Test: $x$ is part of $y$

finger nail – finger – hand – arm – body : meronyms

Hyponymy
Test $x$ is a type of $y$

furniture – seat – stool : hyponyms
Exercise - Hyponymy and Meronymy

1. Divide into groups
2. take a sheet of paper
3. Give 2 examples of hyponymy
4. Give 2 examples of meronymy
5. Again, talk about other languages that people in your group speak.
   5a. Is there always the same hyponyms and meronyms?
   5b. Hyponyms and meronyms vary massively, why do you think that might be the case?
Week 4
Revision

Revision - Types of Semasiological Variation

Literal Extension - Generalisation

*run*
- river runs (coule)
- nose runs (coule)

*verre*
- hard transparent material
- drinking vesel

Metonymic Extension – Part for Whole

*verre*
- Drinking vessel
- Alcoholic beverage

*run*
- river runs (coule)
- person runs (courir)

Metaphoric Extension – Conceptual Comparision

*run*
- machine runs (fonctionner)
- run a company (diriger)

*corchon*
- farm animal
- impolite person
Revision

Revision - Types of Onomasiological Variation

Synonymy
Antonymy
Meronymy
Hyponymy
Exercise

Many good dictionaries list the meanings in chronological order which makes it easier to see the semantic change over time.

Most simple dictionaries list the older meanings at the end.

In groups, open a dictionary and find three lexemes that have a reasonable number of senses listed.

1. Go through each sense and try to identify which kind of semantic extension is responsible for the polysemy
2. Which sense do you think is the oldest / original sense?
3. Do you think that there could be one aggregate meaning that could account for all the senses?
Revision - Tests for Polysemy

Polysemy vs. Vagueness vs. Monosemy

1. Ha ha ha, ça c’est très drôle! Tu te moque de moi toujours.
2. C’est un drôle de type celui-là. Il me regarde jamais quand il parle.

Definitional Tests – Subjective difference

\[ pene \text{ (SW)}: \]
(a) pen
(b) pencil

Logical Tests – Truth Conditions

This man is a minister (‘priest’), not a minister (‘politician’).

Linguistic Tests – Markedness

?? The quartet are playing, and so are Real Madrid
Tests for Polysemy – Senses vs. Feature Clusters

All three tests have fallen out of favour in recent years

Since the 1990s, many semanticists believe that senses don’t actually exist!!

Instead of discrete categories “senses” we have clusters of semantic features.

The meaning is only instantiated in use, relative to context,
where many of these semantic features may or may not be activated.

We will return to this after we have looked at semantic features!
Componentality and Semantic Features

Now we have looked at semantic relations, let’s turn to how we can describe them and explain how we recognise and produce them!
Componentality

Let us go back to one of our philosophical questions

How do you categorise this as a chair?
Componentality - Components of meaning

Componentality is a theory of semantic structure which suggests that we use specific characteristics to distinguish things.

The principle was first put forward by Roman Jakobson
One very clever linguist

In 1938, as quite a young man, he published a paper which attempted to apply the principles of phonology to the Russian Case System.

He hypothesised that the way that phonology is structured also holds true for semantics
It is an elegant theory
Like for phonology, he proposed that concepts (the signifié of the sign), just like the sounds (the signifiant of the sign), are distinguished by a set of semantic features.

That concepts fit a table, distinguishable by a set of traits sémantiques, just like vowels or consonants
Componentality - Components of meaning

Part of this theory has been largely disproven, but part of it still serves today. We will consider that point later when we look at Set Theory, for now, let us work with the principle of semantic features

These distinctive features serve to differentiate /d/ from the nemes of the English consonant inventory; /t/, for instance, sh feature specifications of /d/, except that it is [− voiced]:

(25) /t/ [+ consonantal, − nasal, − sonorant, + anterior, + coronal, −
Componentality - Components of meaning

Just like in phonology, semantic features are not just lists of features, they are hypotheses about how we distinguish things, how we categorise the world.

This explains how we distinguish chair and stool. Which semantic feature is hypothesised to distinguish them?

(1) Take the stool, not the chair
Componentality - Components of meaning

It also explains how we can extend meanings a bit like a foreign accent (e.g. a dark [l] instead of light [l]) is understood in context the same hold true for concepts.

Which of the feature above would allow this, in the example below

(1) The dog has found himself a chair
### Componential Analysis – Onomasiology of TRANSFER

**Table 5.3. Componential analysis of English transfer verbs.**

<table>
<thead>
<tr>
<th></th>
<th>transfer of possession</th>
<th>voluntary transfer</th>
<th>exchange</th>
<th>price</th>
<th>subject receives</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>buy</strong></td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td><strong>sell</strong></td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>−</td>
</tr>
<tr>
<td><strong>steal</strong></td>
<td>+</td>
<td>−</td>
<td>−</td>
<td>−</td>
<td>+</td>
</tr>
<tr>
<td><strong>give</strong></td>
<td>+</td>
<td>+</td>
<td>−</td>
<td>−</td>
<td>−</td>
</tr>
<tr>
<td><strong>swap</strong></td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>−</td>
<td>+</td>
</tr>
</tbody>
</table>

But what about *take, lend, hire?*
Exercise
Some of you will have done this in 1st year, let’s do it again more carefully

Look at the referents here
I especially chose unrealistic, sometimes hard to determine referents
Do you know what they are? How????!!!!!
Exercise

Divide into groups of 2 or 3
With pen and paper,
componential analysis of the TRANSPORT nouns
take your time, this is a difficult task!

motorbike, car, train, plane, helicopter, sailboat, motorboat, ferry, lorry, bus, bicycle
Componentality - Components of semasiological structure (polysemy)

Let go back to our friend *over*

Three Basic Dimensions determine linguistic structuring of space:
TR (trajector, figure); Path, LM (landmark, ground)

The bird flew over the hill
TR Path LM
### Features

#### TR Dimensionality
- DM 1: point
- DM 2: line
- DM 3: thing
- DM Abs: abstract

#### TR Kinaesthesia
- TR Static
- TR Dynamic

#### TR Animacy
- TR – Animate
- TR – Inanimate

#### TR LM Orientation
- TR V - LM V
- TR V - LM H
- TR V – LM Abs
- TR H – LM V
  
  *etc...*

#### TR Tactility
- TR-LM Tactile
  - ex.: shirt over head
- TR-LM Non Tactile
  - ex.: plane over hill

#### TR Plexity
- Multiplex
  - ex.: People over the hill
- Uniplex
  - ex.: Towel is over the pillow
- Abstract
  - ex.: Holiday over my head

#### TR Path Type
- Point
  - ex.: holidays are hanging over head
- Linear
  - ex.: Emotions come over me
- Semi-Circle
  - ex.: ball is over the fence
- Spread
  - ex.: water ran over the floor

#### Path Boundedness
- Bound
  - ex.: sheet laid over bed
- Unbounded
  - ex.: ball few over fence

#### Landmark Expression
- Overt
- Covert

#### Landmark Type
- Point
  - ex.: over a head
- Extended
  - ex.: over there
- Vertical
  - ex.: over fence
- Extended-Vertical
  - ex.: over hill

#### Landmark Dimensionality
- DM 1
  - ex.: point hat over head
- DM 2
  - ex.: line run over here
- DM 3
  - ex.: thing lotion of body
- DM Abs
  - ex.: abstract words over emotions
Over – Polysemy Network

Lakoff (another very clever linguist) in 1984 applied the principle of semantic features to *over*

This is what he got:

The problem is that even with 26 different senses of *over*

if you look an a few hundred examples you find many examples which are either not explained by any of the meanings or are between the two meanings

1. bird is over the fence – (behind)
2. bird is over the forest – (above)
3. bird is over car – ?? behind / above??

Readings!!!