Components of lexical meaning 1

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LING 405

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What We'll Cover

- Midterm Review
- Writing Assignment #3 Review
- Components of Lexical Meaning 1
- For Next Week…

Midterm Review

Graded out of 10 points.
Each point is 1% of your overall grade.

Median score: 7.5

Part One: Multiple Choice

Seven questions; pick five.

The man with the mustache is sitting beside Franklin Delano Roosevelt.

Josef Stalin is sitting next to Franklin Delano Roosevelt.

1. Which of the following is true about images 1 and 2 above?

- "The man with the mustache" and "Josef Stalin" share the same sense, but a different denotation.
- "The man with the mustache" and "Franklin Delano Roosevelt" share the same sense and denotation.
- "The man with the mustache" and "Josef Stalin" share the same sense and denotation.

➤ "The man with the mustache" and "Josef Stalin" share the same denotation, but have different senses.

a)   Michael has never visited New York City.
b)   Michael spent an hour stuck in an elevator in the Empire State Building.

2. What best characterizes the relationship between the above sentences?

- (a) and (b) are synonymous.
- (a) and (b) are contrary.
- (a) and (b) are contradictory.
- (a) and (b) are independent.

They cannot both be true, but they can both be false.

3. Ambiguity is best described as:

- a word's sense leaves some information unspecified.
- **→** when one word-form has several senses.
- a word has one sense, but that sense has hazy borders.
- two different word-forms share the same sense.

4. In the sentence, "Liz Truss has had the shortest premiership in UK history," "Liz Truss" is:

- a natural kind
- an expressive
- **→** a rigid designator
- a word with sense but no denotation

5. Which of the following sentences best demonstrates metonymy?

- I wouldn't say no to a sandwich right now.
- Yesterday, Russia said their their tourism agency was being abolished.
- She's been looking for a new job ever since she was let go.
- I'm sorry I'm late; I was stuck behind the slowest car on the highway.
- A man's house is his castle.

6. Imagine the following scenario: A man walks into a venue where a concert is taking place. Immediately, he puts his hands over his ears and shouts, to no one in particular, "It sure is loud in here!" The other concertgoers pay him little mind. In the above scenario, 'loud' is:

- ambiguous
- contradictory
- indeterminate
- vague

a) Barry rang the churchbell.

b) The churchbell has never been rung.

7. What is the relationship between the propositions expressed by sentences (a) and (b) above?

- (a) entails (b)
- (a) and (b) are synonymous (paraphrase)
- (a) and (b) are contradictory
- (a) and (b) are contrary
- (a) and (b) are independent

They cannot both be true, but they can both be false.

Part Two: Short Answer

Seven questions; pick five.

1. Write a sentence that demonstrates zeugma. Which word in that sentence is ambiguous? Explain what its different senses are.

He was ready to carry his newborn baby on his arms as well as the responsibility that came with it.

Carry-hold something
Carry the baby as well as figuratively "carry" the responsibilities that brought having a baby.

Last week, Luke once again forgot to run the dishwasher.

2. Identify the presupposition and the presupposition trigger in the above sentence.

Presupposition: Luke had forgotten to run the dishwasher sometime before last week.
Presupposition trigger: once again

"Last week, Luke once again forgot to run the dishwasher."

presupposition - Luke intended to run the dishwasher last week
trigger - forgot

3. Choose a pair of homonyms. Illustrate with two sentences. Explain briefly why this demonstrates homonymy and not polysemy.

"Allowed" "Aloud"

I'm "allowed" to go to that party.
I spoke "aloud" at the protest today.

These two words are an example of homonymy because they are different words that sound the same but have different meanings. Polysemy is the same word with multiple senses.

1. We chose to match our outfits .
2. He lit a match to start the fire.

These two sentences are demonstrated as a homonymy because both senses are unrelated, unlike polysemy were two senses are related in some way.

4. Give an example of a polysemous word. Write two sentences where this word appears, but with a different sense in each. Do not use any example sentences from our slides or the textbook.

The polysemous word I'm choosing is record.

1. I asked my mom to record my performance.
2. Mt. Everest holds the world record for the highest mountain.

a) I wanted to show my wife something on TV.
b) We're watching a great show about the world's strongest jellyfish.

5. In the above sentences, does the word 'show' demonstrate polysemy or homonymy? Provide linguistic evidence to support your answer.

Polysemy because these are two different senses of the word show, one is a tv show, and one is a verb to show.

The word 'show' demonstrates polysemy. Polysemy is when one word has different but related meanings.

a) "I wanted to show my wife something on TV."
In this sentence, 'show' means to present something for viewing to see. In the context of TV.

b) "We're watching a great show about the world's strongest jellyfish."
In this sentence, 'show' refers to a television program. In the context of TV.

The word 'show' is used in both sentences in a way that is related to television, demonstrating polysemy where a single word has different but related meanings.

a) I opened the door.
b) The door opened.

6. In the above pair of sentences, does (a) presuppose or entail (b)? Explain how you arrived at your answer. You can use any of the methods described in the textbook.

A entails B because I used the question test. "Did I open the door?" Or "I didn't open the door." either accepts or denies that it happened.

From the slides: "If p entails q, a speaker may refute or doubt pe while keeping their judgment of q independent. With a presupposition, this isn't so."

Note: This is an example of a question where ChatGPT will give you the wrong answer.

I'll show you how ChatGPT addresses this question…

The cruel, cold villain is not cold—in fact, he's in a 110-degree desert!

7. Given the above sentence, is the word 'cold' ambiguous, vague, or indeterminate? Why?

The word 'cold' in the sentence is ambiguous because it can have multiple interpretations. It could refer to the temperature, suggesting that the villain is not physically cold despite being in a hot desert.

The word 'cold' in this context is ambiguous because it could be interpreted in multiple ways. It is one word but has several senses. It can refer to a lack of warmth, as in a cold-hearted person, or it can describe a low temperature, which is contradictory in the given scenario of a 110-degree desert. The ambiguity is that there is two meanings of the word.

Writing Assignment #3 Review

Identify the meaning relations for the five pairs of words below (a–e), and provide linguistic evidence that supports your identification.

For example, if given the pair *tall* and *short*, you would say that they were gradable antonyms, and the evidence might be providing two sentences, "John is tall," and "John is short," and saying that, since these two sentences are contrary, that supports *tall* and *short* being gradable antonyms.

a) sharp   dull

b) two   too

c) arm   leg

d) silver   metal

e) insert   extract

Gradable

Homonyms

Taxonomic Sisters

Hyponym–Hyperonym

Reverses

Possible relations include:
- simple antonyms
- gradable antonyms
- reverses
- converses
- taxonomic sisters
- hyponym–hyperonym
- meronym
- homonym
- synonym

Components of Lexical Meaning I

Components of meaning

• What are a word's "components of meaning"?

ewe 'adult female sheep'

"[…] the meanings of *sheep*, *adult*, and *female* are components of the meaning of *ewe*." p.119

"When people talk about the meaning of one word (e.g. *sheep*) being 'part of', or 'contained in', the meaning of some other word (e.g. *ewe*), they are generally describing a lexical entailment." p.120

Lexical entailments

"When we speak of 'lexical entailments', we mean that the meaning relation between two words creates an entailment relation between sentences that contain those words." p.120

- In other words, when the meaning of B is a component of the meaning of A, sentences with A entail identical sentences with B.

A: assassinate
B: kill
"Oswald *assassinated* Kennedy" entails "Oswald *killed* Kennedy."

A: ewe
B: sheep
"This is a *ewe*" entails "This is a *sheep*."

A: stole
B: took
"John *stole* my bike" entails "John *took* my bike."

The more specific entails the more generic.

Lexical entailments

- We can talk about lexical entailments fairly naturally.

It can't possibly be a dog and not an animal.

It's a dog and therefore it's an animal.

If it's not an animal, then it follows that it's not a dog.

- But if we cast doubt on the entailment, it's unnatural or incoherent.

#It's not an animal, but it's just possible that it's a dog.

#It's definitely a dog, so it might be an animal.

Lexical entailments

- If we deny the entailed component, we get a contradiction.

#Oswald assassinated Kennedy, but he didn't kill him.

#This is a ewe, but she isn't a sheep.

#John stole my bicycle, but he never took it.

#Fido's a dog, but he's not an animal.

#The child fell upwards.

#John is a bachelor but he's happily married.

Remember: A contradiction is **always** false.

Selectional restrictions

- "Selectional restrictions" are constraints on specific word combinations. Note how strange the following sentences are.

a. #This sausage doesn't appreciate Mozart.

b. #John drank his sandwich and took a big bite out of his coffee.

c. #Susan folded/perforated/caramelized her reputation.

d. #Your exam results are sleeping.

e. #The square root of oatmeal is Houston.

f. *My Feet Are Smiling* (title of guitarist Leo Kottke's sixth album)

What's wrong with these examples? Why don't they work?

They are semantically dissonant.

Selectional restrictions

- Selectional restrictions are "a special type of presupposition" (122).

  "Selectional restrictions are part of the meanings of specific words; that is, they are linguistic in nature, rather than simply facts about the world." (p. 122)

- This goes far beyond something that is highly improbable or unlikely. Note your reactions to the following:

"Our kitten drank a bottle of wine." ← unlikely

"Our kitten drank a sandwich." ← selectional restriction

"I know an old woman who swallowed a goat." ← unlikely

"I know an old woman who swallowed a prime number." ← selectional restriction

Selectional restrictions

Words with the same basic entailments may differ regarding selectional restrictions.

- English *snort* and *sniff*

- German *essen* and *fressen*

- Kimaragang *paalansayad* 'great with child'

- How do selectional restrictions differ from collocational restrictions?

"Violations of a collocational restriction are felt to be odd or unnatural, but they can typically be repaired by replacing one of the words with a synonym, suggesting that collocational restrictions are not, strictly speaking, due to lexical meaning *per se*." (124)

Componential analysis

- There've been several attempts to formalize meaning by breaking words up into their semantic features.

- For example, lots of words' meanings differ based on the gender feature:
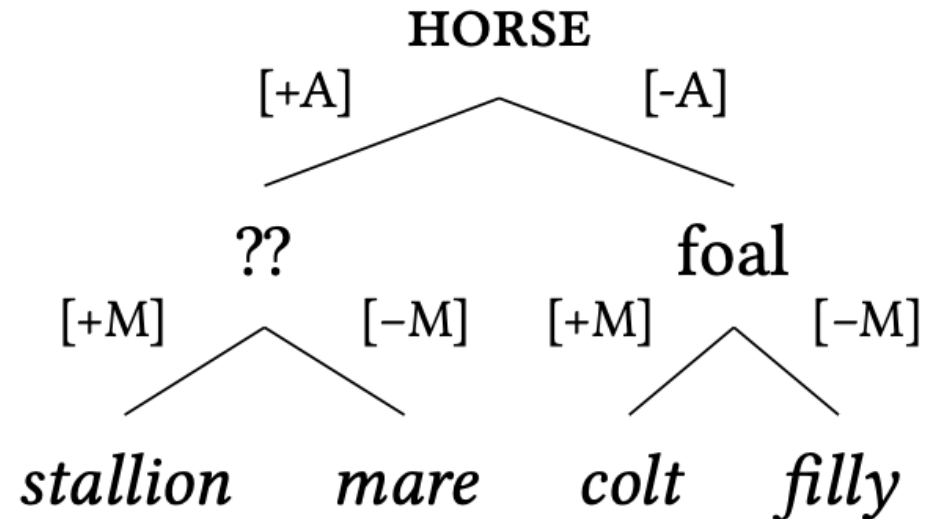
	horse	human	child	sheep
"he"	stallion	man	boy	ram
"she"	mare	woman	girl	ewe

- We can add other features, encompassing age, direction, material, or anything else, really.

Componential analysis

- Linguistically, features like gender and adulthood are binary, and can be represented on trees or in matrices quite easily.

	[adult]	[male]
horse	Ø	Ø
stallion	+	+
mare	+	-
foal	-	Ø
colt	-	+
filly	-	-

Ø means "unspecified"

HORSE

[+A]   [-A]

??   foal

[+M]   [−M]   [+M]   [−M]

stallion   *mare*   *colt*   *filly*

There should be no two identical entries.

Componential analysis

- How would we fill out the following?

	[adult]	[male]
human	Ø	Ø
man	+	+
woman	+	-
child	-	Ø
girl	-	-
boy	-	+

- There's some real elegance to this method.
- Synonyms have all the same components of meaning.
- Complementary pairs differ in terms of one feature (+ for one, - for the other), e.g. *boy* and *girl*.
- Each hyponym inherits all the features of its hyperonym, and adds ≥1 more.

Componential analysis

- In componential analysis, there should be no two identical entries.
- Consider the following. What seems wrong?

	[awake]	[physical]	[pleasant]
thought	+	-	Ø
dream	-	-	Ø
nightmare	-	-	-
kick	Ø	+	Ø

- What feature would you add to distinguish *dream* from *nightmare*?

Practice! (p.133 q.A)

Componential analysis of meaning. In groups, construct a table of semantic components, represented as binary features, for each of the following sets of words. Remember: no two words should have identical settings. If you run into this problem, come up with a new feature to distinguish the words.

1. sister, brother, twin, cousin, father, aunt
2. bachelor, spinster, widow, widower, husband, wife
3. cup, glass, mug, tumbler, goblet, stein

Report back.

1.   sister, brother, twin, cousin, father, aunt

Report back.

2.   bachelor, spinster, widow, widower, husband, wife

	male	solitary	never married
bachelor	+	⊘	⊘
spinster	−	+	+
widow	−	+	−
widower	+	+	−
husband	+	−	−
wife	−	−	−

Report back.

3.   cup, glass, mug, tumbler, goblet, stein

	Physical	Handle	Glass
cup	+	Ø	Ø
glass	+	Ø	+
mug	+	+	Ø
tumbler	+	-	Ø
goblet	+	-	-
stein	+	+	Ø —

Componential analysis

- There are many flaws with this kind of analysis. What are some you can think of?

- Many lexical distinctions can't be explained in terms of simple binary features (e.g. *lion* vs. *tiger* vs. *leopard* vs. *cheetah*).

- How many features would we need to have in order to describe the whole lexicon of a single language?

- An infinity, probably.

- Componential analysis is useful for "certain restricted semantic domains," but not for the lexicon as a whole.

For next week…

- Read the rest of chapter 7.
- Don't forget, Writing Assignment #4 is due by 11:59pm tonight!