Pragmatics

foundations of semantics and pragmatics,
december 18, 2012
Today and Thursday

- Pragmatics: meaning beyond truth conditions
- Performativity
- Gricean pragmatics: maxims and implicature
- Implicature: (neo-)Gricean vs. localist view
- Presupposition

- Also on Thursday: midterm Q&A
Beyond truth conditions

- So far, we have talked about 'meaning' in model-theoretic terms: denotation, entailment, truth conditions

  \[[\text{Montague}]\] = an entity
  \[[\text{is asleep}]\] = a set of entities
  \[[\text{Montague is asleep}]\] = a truth value (1 or 0)

- Not limited to assertion:

  \[[\text{Is Montague asleep?}]\] = \{ \[[\text{Montague is asleep}]\], \[[\text{Montague is not asleep}]\] \} (e.g. Hamblin 1973; skipping over many details...)

Beyond truth conditions (2)

- Example 1:
  
  “Could you pass me the salt?”
  – “Sure.”

- Semantics does not suffice to explain what goes wrong here

- Compare: “Could you lift that rock?”
Beyond truth conditions (3)

● Example 2:

“Some elephants have trunks.”
– “That's not true! All elephants have trunks.”

● Possibility: adjust the denotation of some

$$[[\text{some } A \ B]] = 1 \text{ iff } A \cap B \neq \emptyset \text{ and } A \cap B \subseteq A$$

● But ...

“Some elephants have trunks. In fact they all do.”
Beyond truth conditions (4)

- Example 3:
  
  (a) This exam contains difficult questions.
  (b) This exam doesn't contain difficult questions.

- Possibility: hardwire the plurality into the semantics...
  
  $$[[\text{(a)}]] = 1 \text{ iff } | \{x \mid x \text{ is a question in this exam}\} | \geq 2$$

- But that would lead to the wrong meaning for (b):
  
  $$[[\text{(b)}]] = 1 \text{ iff } | \{x \mid x \text{ is a question in this exam}\} | < 2$$
Pragmatics

- **Pragmatics**: the study of non-referential or non-logical meaning
- Or: the study of meaning in communication
  - informativity and relevance in dialogues, the intention of the speaker, the knowledge that's being presupposed, the significance of things that are not said, speech acts ("I do!")...
- Pragmatic meaning builds on semantic meaning...
- ...but the boundaries are not always clear
Performativity

- J.L. Austin: *How to Do Things with Words* (1955/1962)

- Not all sentences have a truth value (or even a denotation)

- Performativity (or: *illocutionary act*): when language brings about a change in the current state of affairs
  
  “I declare war”

  “I promise to do the dishes tonight”

  “I now pronounce you husband and wife”
According to Austin, a performative sentence cannot be true or false, only 'felicitous' or 'infelicitous'.

Not everyone agrees: there have been many assertoric approaches to performativity (Bach & Harnish 1979, Condoravdi & Lauer 2011).

- Performatives are assertions (with a truth value)
- The performative effect is derived by a contextually-based inference, or by assuming that something in their semantics makes the assertion self-verifying (e.g. self-referentiality)

More on this debate on January 24, when we'll discuss Searle's (1989) challenge to assertoric approaches
Gricean pragmatics

- Paul Grice: *Logic and Conversation* (1975) (among other works)

- How a sentence is interpreted is not just based on its semantic content, but also on *the way it is said*

- Communication is guided by the *cooperative principle*

H.P. Grice (1913-1988)
Cooperative principle

"Make your contribution such as it is required, at the stage at which it occurs, by the accepted purpose or direction of the talk exchange in which you are engaged."

• A conversation has a goal...
• ...that the speaker wants to contribute to...
• ...assuming that the hearer does the same.
Cooperative principle (2)

- The cooperative principle consists of four **maxims**:
  
  - **Quality**: Speak the truth, and don't say things you don't have evidence for.
  - **Quantity**: Don't give too much or too little information.
  - **Relevance**: Make relevant contributions.
  - **Manner**: Be clear and brief ("eschew obfuscation").
Maxims

- **Quality**: Speak the truth, and don't say things you don't have evidence for.

  Context: B has stolen A's chocolates.

  A: “Have you stolen my chocolates?”
  B1: “Yes.”
  B2: “No.”
Maxims (2)

- **Quantity**: Don't give too much or too little information.

  Context: B knows A's chocolates are on the table.

  A: “Where are my chocolates?”
  
  B1: “On the table.”
  
  B2: “Somewhere.”
  
  B3: “On the table, which is an oaken item of furniture located on the other end of this living room.”
Maxims (3)

• **Relevance**: Make relevant contributions.

  Context: B has stolen A's chocolates.

  A: “Someone has stolen my chocolates!”
  B1: “That's terrible.”
  B2: “The weather's really nice today, don't you agree?”
Maxims (4)

- **Manner**: Be clear and brief.

  A: “Tell me about the performance!”
  B1: “Mrs Smith sang *Bridge over Troubled Water*.”
  B2: “Mrs Smith produced a series of soundwaves that resembled the melody of *Bridge over Troubled Water*.”

- Blatant violation of a maxim is called **flouting** the maxim. It can serve a communicative function.

- Violation of a maxim can also occur when two maxims are in conflict.
Maxims in conflict

• Compare the following dialogues:

  A: “Where can I find a service station?”
  B1: “Around the corner. My mother works there.” /
  B2: “Around the corner. But I'm not sure whether it's open.”

• Both possibilities violate Quantity, but unlike B1, B2 is felicitous. Why?

• Conversational partners assume that the other is also following the maxims...

• ...and, from this, can infer information about the other's knowledge.
Maxims in conflict (2)

A: “Where can I find a service station?”
B: “Around the corner.”

Had B known the service station would be closed and hence useless to A, his remark would have violated Relevance.

So A concludes: B thinks that the service station is open.

B, knowing this, preempts this conclusion by adding “but I'm not sure it's open”.

So, violating a maxim can be communicatively meaningful.
Implicature

- An inference like A's ("B thinks the service station is open") is called an **implicature**

- Implicatures come in two flavours: **conventional** and **conversational**
  - **Conversational** implicatures: the information that conversational partners infer from each other's utterances, based on the Gricean maxims.
    
    ...**not entailment**! Conversational implicatures can be cancelled ("But I don't know if it's open")
  
  - **Conventional** implicatures: non-cancellable implicatures that are part of the conceptual meaning of a word

    "John is a banker **but** also volunteers at a soup kitchen. #But I think it's completely standard for bankers to volunteer at soup kitchens."
Implicature (2)

- Implicatures can explain the 'riddles' in the introduction:
  - ...why we interpret a question as a request
  - ...why we interpret “some” as “some but not all”
  - ...why we interpret a plural NP as “more than one”

- Let's look at those examples again
Implicature (3)

• Example 1:

  A: “Could you pass me the salt?”
  B: “Sure.”

• B should reason:
  • A, sitting at the table with me, knows that I'm capable of passing her the salt. To ask a question to which you already know the answer would violate Quantity.
  • Therefore, A must have a different purpose with her question – probably a request for the salt.
Example 2:

A: “Some elephants have trunks.”
B: “That's not true! All elephants have trunks.”

B. reasons:

• A could have made the more informative statement “All elephants have trunks”, but she didn't
• Why not? Probably she does not believe that “All elephants have trunks” is true (so saying it would violate Quality)
• “Competence assumption”: to not believe that \( p \) is to believe that not \( p \)
• So A is saying that not all elephants have trunks
Implicature (5)

• Example 3:

(a) This exam contains difficult questions.
(b) This exam doesn't contain difficult questions.

• Upon hearing (a) we reason:
  • If the exam contained just a single difficult question, the sentence would be more informative with a singular NP.
  • Presumably, then, the exam contains more than one difficult question.

• (b) shows that semantically, a plural NP has a “one or more” interpretation.

  (compare also: “Do you have children?” -“Yes, one.” / -”#No, one.”)
A caveat

• General pattern: If A could have said X, but did not do so, it is implicated that X is not the case.

• But there are many things that A could have said – how do we decide which alternatives are relevant?
  • “John went into a house”: implicature: not his own house, because I could have said “John went into his house”
  • ...but why not this? implicature: it's his own house, because I could have said “John went into someone else's house”

• One class of conversational implicatures where the alternatives are very clear: **scalar** implicatures
Scalar implicatures

- Scalar implicatures: the alternatives (what could have been said) can be represented on a scale based on their strength.
- The strength of an alternative is determined by its entailment patterns.
  - If x entails y but y does not entail x, x is stronger than y.

  **Example 1:** “all elephants have trunks” entails “some elephants have trunks” but not vice versa, so *all* is stronger than *some*.

  **Example 2:** “this chocolate is delicious” entails “this chocolate is good” but not vice versa, so *delicious* is stronger than *good*. 
Scalar implicatures (2)

- The effect of a scalar implicature: all stronger alternatives are negated

  “Some elephants have trunks” implicates...
  
  ... it is not the case that many elephants have trunks
  
  ... it is not the case that most elephants have trunks
  
  ... it is not the case that all elephants have trunks

- one < few < some < many < most < all

- Recall: conversational implicatures can always be cancelled: “...in fact, many/most/all elephants have trunks”
A problem for the Gricean account

- In Grice's theory, implicatures arise because speakers reason about each other's beliefs and intentions.

- Recall the “some elephants have trunks” case:
  - A could have made the more informative statement “All elephants have trunks”, but she didn't.
  - Why not? Probably she does not believe that “All elephants have trunks” is true.
  - “Competence assumption”: to not believe that $p$ is to believe that not $p$.
  - So A is saying that not all elephants have trunks.

- But this theory has a problem with **embedded implicatures** (cf Chierchia 2004).
Embedded implicatures

• Example:

  A: “Mary believes that some elephants have trunks”.

• This sentence implicates “Mary believes that not all elephants have trunks”, but it seems this can't be derived by reasoning about A's beliefs:
  • A could have made the more informative statement “Mary believes that all elephants have trunks”, but he didn't
  • Why not? Probably A does not think that “Mary believes that all elephants have trunks” is true
  • “Competence assumption”: to not think that $p$ is to think that not $p$
  • So A is saying that it's not the case that Mary believes that all elephants have trunks
Localists versus Griceans

- The localist or grammaticalist solution: scalar implicatures are associated with the semantics of the scalar items in question, so they can be triggered locally.

- Crucial question: do embedded implicatures really exist?
  - Geurts & Pouscoulous (2008, 2009): no, in fact they don't
  - Chemla & Spector (2011): yes, they do
Localists versus Griceans (2)

- Experimental setup: a scalar item in the scope of a quantifier

  “All the squares are connected to some of the circles.”

- *Logical interpretation*: Every square is connected to at least one circle.

- *Gricean interpretation*: Every square is connected to at least one circle and it is not the case that every square is connected to all the circles.

- *Local interpretation*: Every square is connected to at least one circle, and no square is connected to all of the circles.
Localists versus Griceans (3)

- Geurts & Pouscoulous (2008): all participants judge the sentence true, even though it's false under a local interpretation.
- Conclusion: the implicature is not computed locally.
Chemla & Spector (2011): fixed what they believe are some methodological issues with the Geurts & Pouscoulous study.

Findings: higher ratings in the 'strong' condition (where all three interpretations are true) than in the 'weak' condition (where only the local interpretation is false).

Conclusion: people are sensitive to the local interpretation.