

April 11, 2006

## CLASS 24: INFERENCE & FORMAL SEMANTICS

### FOCUS AND TOPIC

- (1) A: His cat is called Polly.  
B: No, her name's MISS EMMA. *intonational focus*
- (2) As for Miss Emma, she's the cutest cat in the world. *topic*
- (3) a. MARY likes Joe. *presupposes* Somebody likes Joe.  
b. Mary likes JOE. *presupposes* Mary likes someone.
- (4) a. In Nicosia, POLICEMEN never indicate.  
b. In Nicosia, policemen never INDIDCATE.
- (5) a. I don't eat FISH.  
b. I don't EAT fish.
- (6) Who went to the party?  
a. MAX went to the party.  
b. ??Max went to the PARTY.
- (7) Where did Max go?  
b. Max went to the PARTY.  
a. ??MAX went to the party.

### INFERENCEAL PRAGMATICS

- *inferential pragmatics* tells us what doesn't need to be accounted for in semantics

- (8) *I've read some of those books.* [Usually: 'some but not all']

But not always...

- (9) A: *Have you read some of these books?*  
B<sub>1</sub>: *Yes — but I couldn't face the others.*  
B<sub>2</sub>: *Yes — in fact, all of them.*

So how should we deal with *some* ?

- semantically — lexical ambiguity?  
*some*<sub>1</sub> = 'some but not all';  
*some*<sub>2</sub> = 'at least some (possibly all)'

➤ This adds a complication to the lexicon – is it necessary?

- Gricean analysis (Class 23): *some* has one basic meaning which has no upper bound

- but due to Quantity & Quality an upper bound ('less than all') usually understood:
  - the speaker is as usefully informative as possible
  - knowing whether all is true is generally useful information
  - so using *some* instead of *all* communicates that speaker cannot truthfully assert all
  - hence common meaning 'some but not all', though this isn't lexical meaning of *some* ('Scalar implicature')

- (10) a. The lone ranger jumped on his horse and rode into the sunset.  
 b. ??The lone ranger rode into the sunset and jumped on his horse.
- (11) a. Joe taunted Ralph and Ralph hit him.  
 b. First Joe taunted Ralph and then Ralph hit him.  
 c. Joe taunted Ralph and Ralph hit him, but not necessarily in that order.
- (12) a. I went to the store and bought whiskey.  
 b. I bought whiskey and went to the store.

- should we postulate two *and*'s in the lexicon:  $and_1$  = 'logical &',  $and_2$  = 'and then'?

### PROBLEMS WITH GRICE

A. What's the *status of the maxims*?

- social or cognitive? learned or innate? universal or cultural?
- different maxims seem different in nature

B. What are the *criteria for a maxim*?

- How many do we need? How independent are they?  
 (cf. Quantity and Relevance; Manner and Quality)

C. Co-operation as the *basis for utterance interpretation*:

- unco-operative utterances are understood too!
- 'opting out' is problematic

### DEVELOPMENTS OF GRICE'S APPROACH

Neo-Griceans: attempts to *reduce & refine the maxims* (Stephen Levinson, Larry Horn)

- generally based on quantity ('informativeness') and quality ('truthfulness')
- makes for a neater theory, but does it address all the problems?

*More problems with Grice:*

- we're dealing with context-dependent meaning — so we really need a theory of C:
- How do we select useful bits of contextual information?
- How do we access and exploit each other's assumptions and intentions?
- How do we know "the accepted purposes and direction of the talk exchange" and what kind and amount of information is "required" by it?

#### What is said... and what is meant

- *not always the same* (cf. speech acts) — in fact, what is said is *rarely all that is meant*
- the reasons why we say what we say matter
- the implications of what we say matter
- what we say is often ambiguous, over-general or uninformative, out of contexts
- so *understanding utterances* involves more than understanding the language used
- how do we know to look for meanings that aren't given by the linguistic forms?

#### and it's not only speech acts...

- (13) A: Has John got a girlfriend?  
B: He's been making a lot of trips to Paphos lately.
- (14) I've read some of those books.
- (15) A: I've run out of petrol.  
B: There's a garage just round the corner.

### IMPLICATURES

Grice coined the term implicature for *communicated non-truth-conditional meaning*.

- a *conventional implicature* is non-truth-conditional meaning associated with a particular linguistic expression, e.g.: *Even John couldn't eat the quince and locust fritters*.
- a *conversational implicature* is not intrinsically associated with any expression; it is inferred from the use of some utterance in context

- (16) John's been making a lot of trips to Paphos lately.

### PROPERTIES OF IMPLICATURES

#### ❶ *Context-dependent:*

- (17) A: Has John got a girlfriend? / Has John started his Christmas shopping yet?  
B: He's been making a lot of trips to Paphos lately.
- (18) A: I've run out of petrol. / Damn; it's midnight already and I'm starving.  
B: There's a garage just round the corner.

② *Cancellable* (or defeasible; see also *inferential pragmatics* above):

- (19) A: Has John got a girlfriend?  
 B: He's been making a lot of trips to Paphos lately.  
*...That usually means he's on the pull, so I don't suppose he has a girlfriend.*
- (20) I've read some of those books.  
*... In fact, unlike you, I've read them all.*
- (21) A: I've run out of petrol.  
 B: There's a garage just round the corner.  
*...They've run out of petrol, but might be able to call someone who could help.*

③ *Non-detachable* (usually), i.e. no loss of implicature by substituting synonyms:

- (22) A: Has John got a girlfriend?  
 B: He's been a regular visitor to the south of the Akamas peninsula recently.
- (23) I've completed a number of those tomes.
- (24) A: I've run out of petrol.  
 B: You'll find a filling station just beyond that bend.

But note that certain implicatures *are* detachable (because they depend on the manner in which the utterance is phrased) — these have been addressed under *flouting* when we talked about Gricean Maxims (Class 23):

- (25) She produced a series of sounds that roughly correspond to the score of *I am alive*.  
 (26) She sang *I am alive*.

④ *Non-conventional* (as different from cancellability or non-detachability):

- (27) John's a machine.

⑤ *Calculable*:

Conversational implicatures should be calculable from the meaning of what is said plus identifiable aspects of the context — But how?

## FORMAL SEMANTICS

- *model-theoretic* semantics: model (W, I, T, L, <) & interpretation (meaning/model)
- *Davidsonian* semantics: TCs without possible worlds, holistic, Chomskyan syntax
- *situation* semantics: 'state of affairs', intersection of linguistics, philosophy & logic
- relationships with *other varieties* of semantics (non-TC) / *other fields* (cognition)