



# Predicting non-projecting presuppositions

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# Projecting presuppositions

- Presuppositions triggered at a lower level are realised at a higher level
- Diagnostic of presuppositions, as a form of content

cf. (1) John knew that Mary was away.

(2) John didn't know that Mary was away.

- Presupposed content *projecting* from under the scope of negation
- Ps. can also be *accommodated* if not common ground

# The projection problem

- Projection of ps. is not entirely consistent
  - (3) John didn't know that Mary was away, because she wasn't away.

does not appear wholly self-contradictory, much like the scalar implicature case

- (4) John ate some of the cakes, and in fact all of them.

# The projection problem

- Broad theoretical agreement that the ps. of (3) ultimately does not project, but disagreement as to
  - why
  - what kind of processing underlies this
  - the time-course of the (non-)projection, etc.
- Two major (sets of) candidate theories:
  - Dynamic semantic approach, following Heim (1983)
  - Pragmatic approach, following Stalnaker (1976)

# Contrasting the theories

- Dynamic semantic approaches treat projection as arising from (some elaboration of) rules of semantic composition
  - Projection failure is treated as *local accommodation*: the ps. is bound at a local level
  - General preference for *global accommodation* can be posited as a root cause of why projection normally takes place
- Pragmatic approaches treat projection as arising from conversational principles
  - Projection failure is attributed to contextual factors
  - *Default inference* (à la Levinson 2000) can be posited as a root cause of why projection normally takes place

# Inevitable parallel...

- Scalar implicature (much discussed in the experimental literature)
- Questions arise as to whether
  - aspects of the meaning are semantic or pragmatic (or something in between)
  - enriched meanings arise by default or only under contextual licensing conditions
- However, theories agree on the ultimate interpretation (such as is accessible to introspection)
- Experimental work has the potential to distinguish these theories

# Chemla and Bott (in press)

- Examining RTs for embedded ps. triggers with false complements:
  - (5) The Martian geologists did not realise that elephants are reptiles.
- True on *local*, false on *global* reading
- Elicits faster rejections than acceptances
- Dynamic semantic approach argued to predict this (global-first); pragmatic approach argued to predict reverse

# Chemla and Bott (in press)

- Examining RTs for embedded ps. triggers with false complements:
  - (5) The Martian geologists did not realise that elephants are reptiles.
- Possible issues:
  - Presentation of bare stimuli invites particular inferences about context/QUD
  - How specific are these findings to the particular trigger under test ('realise')?
  - How tolerant are responders to false pss?

# Even more generally...

- Study (like many, many others) looking at interpretation of artificially constructed stimuli
- Necessary for control etc.
- Also legitimate pieces of language, so interpretation is of potential interest
- But question does arise of how much contextual material has to be present for these items ever to be felicitously uttered
  
- What if we turn it around and look at the speaker?

# In defence of focusing on the speaker

- I assume that the goal of the hearer is to discern the communicative intention of the speaker
  - Includes drawing enrichments **iff they are intended**
- Hearers are very adept at this in the case of implicature
  - e.g. Bonnefon et al. (2009)
- Some constructions systematically presuppose new information that is intended to be accommodated:
  - “I just found out that...”
  - “I never knew that...”

# What is S up to?

Q: Why would a cooperative speaker use a ps. trigger when its complement was in fact false?

Why say 'realise' in

(5) The Martian geologists did not realise that elephants are reptiles

instead of

(6) The Martian geologists did not find that elephants are reptiles

or even

(7) Elephants are not reptiles ?

# Demands of cooperativity...

- (7) entails (5), but doesn't say anything about the Martian geologists...
- (6) entails (5), but doesn't say anything about 'realising'...
- Maybe the speaker of (5) needs, at the same time, to say something about the Martian geologists, 'realising', and the claim that elephants are reptiles
- But why?
- Two possibilities: appeal to question under discussion, or appeal to priming effects

# Demands of cooperativity...

- (5) appears to surface most naturally as a response to
  - (8) Did the Martian geologists realise that elephants are reptiles?
  - or (9) The Martian geologists realised that elephants are reptiles
- This could be because
  - the low-level structures of (8) and (9) give rise to priming effects (Pickering and Garrod 2004)
  - the Question Under Discussion specified by (8) or (9) needs to be addressed in the response (Roberts 1996, Gualmini et al. 2008)

# Handling presuppositions

Amaral, Cummins and Katsos (2011)

“Is Jane’s book continuing to sell well?”

“No, it is not selling well” > “No, it didn’t use to sell well”

Better still might be

“No, it stopped selling well”

“No, it never sold well”

- Idea: need to respond to ps. in preceding discourse

# Suppressing an enriched meaning

Cummins, Sauerland and Solt (2012)

“more than 90” +> “not more than 100”

**but** implicature weakened if 90 is a contextually salient concept prior to the first utterance

- General idea: stronger statement has to be relevant for an implicature to go through
- Sufficiency of weaker statement => no enrichment

# Positing a context

Cummins, Sauerland and Solt (2012)

“more than 93” +> for some reason, 93 is significant

leading to **less robust quantity implicatures**

- By analogy, “doesn’t realise that...” could convey the sense of ‘realising’ as a discourse-relevant notion per se, rather than as a ps. trigger

# Back to the lab

- Participant's response to (5) might plausibly involve
  - Inferring a prior context
  - Determining on that basis how the presupposition is to be understood
  - Adding it, if appropriate, to their situation model
  - Evaluating that against general knowledge
  - Pressing a button to signal...something
- Experimenter's role is to interpret the response time
  - How exactly?

# Trying to exclude confounds

- Claims about the potential problems are themselves testable
  - Better control of preceding context, if it transpires that the material present there – and its informational status – affects the outcome
    - Could explicitly specify question....
  - Materials may be systematically unnatural without contextual support
    - Could use naturally occurring or spontaneously elicited materials
  - For these, and for other considerations, we should at least check what is likely to make a difference!
  - Ideally, nothing would...

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