Abstract

- Overall conveyed meaning is made up of various layers: literal content, implicatures, presuppositions.
- How do those types of meaning relate to one another, a) theoretically, and b) in processing?
- Are there sub-classes / other dividing properties?
- Present project: Presuppositions in Processing
  - Time-course of Presupposition Processing
  - Comparison of different Classes: Soft vs. Hard Triggers (Abusch 2010)
  - Visual World Paradigm (cf. Implicature research)
- Result: Soft and Hard Triggers are fast in processing except for critical inference in critical condition

Presuppositions

- Examples: the, also, stop, again, win, clefs, etc.
- Traditional Picture: (Stalnaker, Heim Karttunen)
- Taken for granted (Backgrounded)
- ‘Immune’ to embedding operators like negation
- Experimental Perspectives:
  - Evidence for (Sub-)Classes of Meaning?
  - Time-course of access & underlying mechanisms
  - Previous Results: Rejection of Presuppositions slow (vs. asserted content), but online processing fast
  (Schwarz 2007, 2014a,b Schwarz & Tiemann 2012)
- Focus here: Comparison of Soft & Hard Triggers

Soft vs. Hard Triggers

- Status of Presuppositions:
  - Conventional Semantic content OR
  - Pragmatic inference?
- Abusch (2010, a.o.): Presuppositions of soft triggers (e.g., stop) based on reasoning about alternatives
- Contrast with Hard Triggers (e.g. again):
  - I don’t know if Sam was drinking last night. But if he stopped drinking at 5am? It is drinking again now ...
- Previous experimental results
  - Mostly on hard triggers
  - Are soft triggers slower in processing?

Experimental Designs & Task

- Visual World Design: Target, Competitor, 2 Distractors
- Calendar Strip paradigm: iconic representations of events throughout the course of a week

Expt 1: Again vs. Twice

Context: Some of these children went to play golf on Monday, and some to play volleyball.
Target: John went to play golf…
  a) ... again later on ...  
  b) ... twice this week ...
  ... and also played soccer on Tuesday.
Critical Inference: John had played golf before Thursday
Presupposed (Again) vs. Asserted (Twice)

Ambiguous during underlined portion except for critical inference in critical condition

Again vs. Twice Results

- Main and Simple effects of Control vs. Critical
- Significant for ambiguous period (0 - vertical line) and 200ms time-windows starting 200ms after onset
- No interaction
- Clear evidence for rapid presupposition utilization
- No difference from assertion of same content
- Parallels results for also vs. only (Schwarz 2014b)

Context sentence to set the stage

Target sentence temporarily ambiguous
Subjects identify individual that sentence is about

Target: Monday, and some to play volleyball.

Data Analysis

- 27 participants per Expt 6 items per condition
- Target Advantage = Target Looks - Competitor Looks
- LMEM (max. random effect structures) on Elgot-transformed TargAdv (ambiguous window and 200ms parts)

Stop Results

- Significant difference in Target Advantage
  - Scores for ambiguous period (0-vertical line) and 200ms time-windows starting 200ms after onset of stop.
- Presupposition of stop (there’s something that has been eaten prior to a certain point in the week) is immediately available
- No direct comparison with assertion, but presupposition effect as early as possible

Summary of Results

- Results broaden evidence on the online processing of presupposed content
- Results suggest that presuppositions are available immediately
  - Inconsistent with accounts that predict delayed availability due to pragmatic derivation
  (But consistent with rapid pragmatic processing!)
- Direct comparison with assertion
  - (Again vs. Twice) reveals no difference in processing time course
  - Contrast with (some) results on implicatures
  - Comparison of soft and hard triggers reveals no processing difference
  (But theoretical distinction may be independently motivated)

Further Issues

Could effects be due to predictability?
- Distractors helped to hide pattern
  (one with repetition, one without)
- No apparent order effects for again (if anything, twice lags behind in first quarter of trials)

Entailed presuppositions?
- Many accounts take presuppositions to be entailed
  - Really about presupposition?
- Differences between presupposition and assertion in Rejection RTs (Schwarz 2014b) and (possibly) in eye movement patterns (Schwarz 2014b)
  - Not clear that this is empirically supported

Initial Results on Projection partly promising for account of Schwarz & Tiemann 2014:
  - don’t stop delayed compared to stop

Expt 2: Stop

Context: These children got nice treats for their snacks this week.
Target: John stopped eating the delicious apples on Thursday.
Critical Inference: Henry was eating apples prior to Thursday

Ambiguous during underlined portion except for critical inference in critical condition

Stop Onset Time

Critical

Further Issues

Could effects be due to predictability?
- Distractors helped to hide pattern
  (one with repetition, one without)
- No apparent order effects for again (if anything, twice lags behind in first quarter of trials)

Entailed presuppositions?
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Initial Results on Projection partly promising for account of Schwarz & Tiemann 2014:
  - don’t stop delayed compared to stop

Selected References

Blut et al 2014. Induced scale implicatures are neither scalar implicatures nor presuppositions (or both) Poster at CLiP 27.

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