Scope Islands and How to Escape

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Abstract

- I want to present a possibly ‘geometrical’, analysis for a formal problem in the interpretation of natural language.
- It is a rather abstract problem, but I hope to introduce it by means of some quite simple and informal examples.
- I would like to delve more deeply into the issue by means of two specific examples, worked out fully formally elsewhere.
- The dynamics of presupposition along the lines suggested by Stalnaker.
- The treatment of information structure along the lines of Karttunen and Peters, and van der Sandt and Geurts.
- It will be seen that by distributing aspects of interpretation over various dimensions we receive a brand-new perspective on apparent scope island violations.
Some Recent Players and Old Questions

- some from the ‘dark side’ and some ‘naive’ ones
  - Robyn Carston, Francois Recanati, Daniel Sperber, Deirdre Wilson
  - Kent Bach, Graham Katz, Jason Stanley, Zoltan Szabo

- some old questions
  - is a general distinction between semantics and pragmatics tenable
  - can we say enough about meaning in terms of truth-conditions
  - how pervasive is the context of use in interpretation
  - (when) are we multiplying meanings beyond necessity
Some Challenges Alluded Too

(1) Smith’s murderer is insane.
(2) Jones is raking the leaves.
(3) A: Her husband is nice to her.
(4) B: He is nice to her, but he is not her husband.
(5) Anke, Laura, and Petra went to the bank.
(6) Every professor introduced every student to his class.
(7) The next 20 years the president will be a democrat.
(8) The next 20 years he will be a republican.
The Use of Indexing

(14) He whistles. $\sim \Rightarrow$ He$_i$ whistles.

- underspecification leaves us with no interpretation
- disjunction yields the bank/bank/bank problem

(15) Bill outran Will. Everyone saw him. $\neq$

(16) Everyone saw at least Bill or Will.

- so we accommodate an infinite number of interpretations
- each one of which is pragmatically determined
One- or More Dimensional Interpretation

- distinguish assertoric, presuppositional and other aspects of interpretation (Karttunen and Peters)

(19) Pedro hired a donkey.
  - presupposes a guy $p$ named ‘Pedro’
  - introduces a donkey $d$
  - asserts that $p$ hired $d$

- a ‘binding problem’?

(20) Someone managed to succeed George V on the throne of England.

- a case of coreference (like in DRT, DPL, etc.)
A Flexible Treatment of Presupposition Resolution

(21) Everyone moved to Stuttgart because a woman lived there.

- ... because Stuttgart is not 100% male?
- ... because Dorit Abusch lived there?

\[ \Rightarrow \ldots \text{because everyone’s beloved one lived there.} \]

\[
\begin{array}{c}
S \\
\text{ALL} & \text{VP} \\
\text{CAME} & \text{AC} \\
\text{BECAUSE} & \text{S} \\
\text{SOME WOMAN} & \text{CAME}
\end{array}
\]
Island Constraints

- no violations; it is the pragmatic contribution of an indefinite, not its assertoric force, which is insensitive to the constraint “presuppositions can swim”
- the assertoric contribution is a witness $f(d)$ figuring right there at the logical level where the indefinite occurs
- that there are pragmatic effects associated with the use of indefinites is orthogonal to their semantics
- thus, indefinites behave like other noun phrases:
  - proper names, pronouns, definites, . . ., and
  - generalized quantifiers as well

(22) If a boy goes to a party because he thinks most girls in his class come too, he is disappointed, of course, when they don’t show up.
(23) Everyone visited a student in Stuttgart because a professor told him to do so.

- two of at least four interpretations
  1. everyone visited an arbitrary student because a specific professor told him to do so
  2. everyone visited a specific student because an arbitrary professor told him to visit that student
- no likely interpretation is one according to which some subjects satisfy one of these conditions and all the others the other
- we can exclude this by indicating the pragmatic mode of composition on the level of logical form
Conclusion

- bottom-line
  - semantics is clean, elegant and perspicuous, or so we hope
  - pragmatics is dirty and intriguing

- but semantics has become pragmatically infected in the meantime

- with underspecification or in DRT resolution takes place in a global fashion, postponing interpretation/evaluation to a later stage

- alternative: let logical form locally determine how pragmatic aspects of interpretation (pragmatic bits of information) are dealt with

- but indeed this invites those from the dark side right to our sacred place