Extra credit 1

Chris Potts, Ling 130a/230a: Introduction to semantics and pragmatics, Winter 2016
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This extra credit is optional and open to everyone in the class. Any points you get on it will be added to your total in-class exercise points for the term. In this way, it can make up for a missed exercise. To receive credit, the work needs to be submitted to linguist130a-win1516-staff@lists.stanford.edu by 10:30 am on Feb 16. No late work will be accepted for credit (but we’ll still give you feedback on it).

1 Exceptives [up to 2 points]

Consider the following proposal for the meaning of the complex determiner every... except Kermit:

(E) \[ \text{every... except Kermit} = \{ (A, B) : (A - \{[[\text{Kermit}]]) \subseteq B \} \]

i. Does meaning (E) entail that Kermit is a member of the set A (the restriction)?

ii. What is your intuition: does a sentence like every Muppet except Kermit danced entail that Kermit is a Muppet?

iii. For a sentence like every Muppet except Kermit danced, does meaning (E) entail that Kermit did not dance?

iv. What is your intuition: does a sentence like every Muppet except Kermit danced entail that Kermit did not dance?

2 Object QPs [up to 1 point]

Our theory of composition has (at least) one shocking shortcoming: we are not able to interpret QPs when they are the objects of transitive verbs, but rather only when they are grammatical subjects. We can’t give a meaning to a seemingly simple phrase like tease every Simpson! Address the shortcoming by completing the following rule of composition:

(QV) Given a syntactic structure \[ \text{VP, } [\text{VP}] = \]

\[ \text{V} \quad \text{QP} \]
3 Locative expressions

As part of a project in computational pragmatics, a team of researchers at Stanford and UMass Amherst developed an online two-player game in which people collaborated to solve simple problems while navigating a maze world (Djalali et al. 2011, 2012; Potts 2012; Vogel et al. 2013a,b). The players communicated via a chat interface. One of the constraints was that each player could see their own location, but not that of their partner. As a result, many of the chat messages people sent just described their current location for the other player. These messages tended to be short, since typing is a bit of a hassle during game play, but frequent, since exchanging information was crucial to solving the game.

All the players’ actions in the game world were recorded, so we can see where they were when they uttered these messages. Each of the following heatmaps is focused on a different locative utterance, with the heatmap showing the distributions of the locations themselves. Darker colors mean higher probability that the player was in that location when uttering the locative phrase. For example, the heatmap in the top left indicates that, when people uttered the phrase “top left”, they tended to be at or very near the top left corner. Thus, we can see these distributions as probabilistic meanings, in some extended sense, for these locative utterances.

Your task In a few sentences, describe the Gricean pressures that seem to be shaping these usage patterns in ways that go beyond the literal semantics of these utterances, and illustrate how this explanation works with reference to the heatmaps.

References


