Extra credit 1

Chris Potts, Ling 130a/230a: Introduction to semantics and pragmatics, Winter 2015

Distributed Feb 12; close-date Mar 5

This extra credit is optional and open to everyone in the class. Any points you get on it will be added to your total quiz points for the term. In this way, it can make up for a missed quiz. To receive credit, the work needs to be submitted to linguist130a-win1415-staff@lists.stanford.edu by 10:00 am on March 5. No late work will be accepted for credit (but we'll still give you feedback on it).

Salience, the, and both  

[up to 3 points]

Background  
Our in-class experiment 2 probed the conditions under which definite descriptions like the front wheel successfully refer even though there are multiple salient objects satisfying their descriptive content (say, multiple bicycles, for this example). The results of the experiment suggest that reference succeeds only where the listener is able to use pragmatics and contextual understanding to home in on a single salient referent that satisfies the definite description. For additional background, details, and examples, see the experimental materials and report posted at the course website (direct link: http://web.stanford.edu/class/linguist130a/surveys/ling130a-survey-2015-definites.zip).

The question  
Do these findings for the extend to the presuppositional determiner both?

Your task  
Your task is to begin to create materials that could be used to address this question. Create three pairs of two-sentence discourses with the following properties:

- Within each pair, the second sentence is identical, and it has a both noun phrase in initial, subject position.

- Within each pair, the general context is the same, and we can expect it to contain three or more objects satisfying the descriptive content of the second sentence’s both nominal.

- Within each pair, one of the initial sentences seems to make salient two specific objects satisfying the descriptive content of the second sentence’s both nominal, whereas the other initial sentence fails to do that.

For example, if this question were about the definite article, then one such sentence pair would be:

i. Sam brought his bicycle to the campus bicycle shop. The front wheel was misaligned.

ii. Sam was browsing around the campus bicycle shop. The front wheel was misaligned.
One often hears phrases of the form up to X or more, as in “Save up to 20% or more” or “Bonus up to $100 or more” or “Up to two weeks or more”.

Task 1  Provide a meaning for up to X or more as a generalized quantifier (i.e., as a set of pairs of sets), and provide evidence that the meaning captures the basic truth conditions.

Task 2  How does this phrase work pragmatically? Its meaning is weak to say the least. Why do people use it?

Note  In thinking about this, it might be useful to do some Googling to see who uses such phrases and where. Directly quoted search strings like the following seem to do well:

“up to * or more”
“up to 1..100 * or more” (set the numerical range however you like)

Object QPs

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!

i. (2 points) Address the shortcoming by completing the following rule of composition:

(QV) Given a syntactic structure VP, [VP] =

ii. (2 points) Use your rule (QV) to specify the meaning of the top (root) node in the following tree after all the allowable substitutions from functional applications: