Assignment 2
Chris Potts, Ling 130a/230a: Introduction to semantics and pragmatics, Winter 2016
Distributed Jan 19; due Jan 26

1 neither vs. none [3 points]
In what ways do neither and none differ? Both seem to have ‘negation’ about them, but they are not synonyms. Identify three differences between them. These differences can concern your intuitions about syntactic well-formedness or meaning. Notes:

• For each difference, you'll want to present a pair of sentences that differ only in that one uses neither and the other uses none.

• If well-formedness is the issue, presumably one of the pair will strike you as ungrammatical and the other grammatical. Use the linguist's * to mark the ungrammatical one. In 1–2 sentences, articulate what you see as the nature of the contrast.

• If meaning is the issue, both sentences should be well-formed, but they should differ in what they assume about the context of utterance and/or what they convey. In 1–2 sentences, articulate what you see as the difference(s).

If you are interested in doing this problem in another language, see or write to the staff to discuss that idea — there are lots of options.

2 Intersective? [2 points]
Determine whether the complex determiner less than half, as defined here, is intersective:

\[
[\text{less than half}] = \left\{ (A,B) : \frac{|A \cap B|}{|A|} < \frac{1}{2} \right\}
\]

Important note: this is 'intersective' in the sense of the Keenan article and the ‘Quantifiers’ hand-out, not ‘intersective’ in the sense of the Partee article and our discussion of adjectives.

Required ingredients:

i. Provide a pair of English sentences that supports the classification as intersective or not intersective, along with arrows indicating which entailment relations do and do not hold.

ii. If an entailment relation doesn’t hold, use the definitions of intersectivity and \([\text{less than half}]\) to explain why. The key step here is to identify sets \(A\) and \(B\) for which the entailment fails to hold and use them to construct your argument.
3 A (non-existent) non-conservative determiner [2 points]

Consider the hypothetical quantificational determiner hartig:

\[ [\text{hartig}] = \{\langle A, B \rangle : |A| = |B| \} \]

Thus, hartig hippos skateboard would be true just in case the set of hippos had the same cardinality as the set of skateboarders. Show that this hypothetical determiner is not conservative. To do this, you just need to find a counterexample — sets \( A \) and \( B \) that fail the conservativity test when given as arguments to \([\text{hartig}]\) — and explain why those sets constitute a counterexample.

4 Cardinals and universal generalizations [3 points]

Keenan offers the universal generalization “Lexical NPs are always monotonic” (p. 49). Here, “lexical” means just a single word in the intuitive sense, and we assume that Keenan intends to say “always monotonic on their second arguments”, since most is not monotonic on its first argument.

In light of this generalization, consider the following two analyses of the determiner three:

(E) \( \{\langle A, B \rangle : |A \cap B| = 3 \} \) ('exactly' semantics)

(A) \( \{\langle A, B \rangle : |A \cap B| \geq 3 \} \) ('at least' semantics)

Task 1 One of these would violate Keenan's generalization if used as the meaning of three, and one of them would respect his generalization. Identify which is which, and then provide English sentences that help us to see why this is so. (You might use \( \Rightarrow \) to mean “always entails” and \( \not\Rightarrow \) to mean “does not always entail”.)

Task 2 Which of the proposed meanings seems more accurate to you empirically as a meaning for three? In a few sentences, say which one you favor and why. (To do this, it might be easiest to show that the one you disfavor gives the wrong results for some particular case or cases.)