### Some answers resembling great final exam answers

Chris Potts, Ling 130a/230a: Introduction to semantics and pragmatics, Winter 2022

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## 1 Quantifiers, entailments, and implicatures

A classic Gricean argument is that *few* is semantically consistent with *no* but tends to exclude it pragmatically because of a quality–quantity interaction. This argument depends on the semantic claim that *no* entails *few*. Your task is to support this claim, assuming the following meanings:

(M) 
$$\llbracket few \rrbracket = \lambda X \left( \lambda Y \left( \mathsf{T} \text{ if } |X \cap Y| < k, \text{ else } \mathsf{F} \right) \right) \text{ (for } k \ge 1$$

(E)  $[no] = \lambda X \Big( \lambda Y \Big( \mathsf{T} \text{ if } X \cap Y = \emptyset, \text{ else } \mathsf{F} \Big) \Big)$ 

In this context, a determiner meaning  $D_1$  entails another determiner  $D_2$  if and only if the following holds: if  $[D_1](A)(B) = T$ , then  $[D_2](A)(B) = T$ , for all A and B.

**Answer** Assume [no](A)(B) = T for arbitrary *A* and *B*. Then  $A \cap B = \emptyset$ , which means  $|A \cap B| = 0$ . Since  $k \ge 1$ , it follows that  $|A \cap B| < k$ , and hence [few](A)(B) = T.

## 2 Presuppositional quantificational determiner

Keenan defines a quantified, presupposition-free version of neither as follows:

(K) 
$$\lambda X \left( \lambda Y \left( \mathsf{T} \text{ if } |X| = 2 \text{ and } X \cap Y = \emptyset, \text{ else } \mathsf{F} \right) \right)$$

Convert this to a presuppositional quantificational determiner, on the model of our presuppositional treatment of *both*.

#### Answer

- [neither](X) is defined if and only if |X| = 2
- Where defined,  $[neither](X) = \lambda Y$  (T if  $X \cap Y = \emptyset$ , else F)

### **3** Monotonicity and presuppositionality

Although our meaning for *neither* shares its at-issue component with the meaning *no*, we can easily show that itemize [neither] is nonmonotone on its first argument. Consider  $A = \{a, b\}$  and  $B = \{c, d\}$ . We have [neither](A)(B) = T. However, if we shrink *A* to the subset  $X = \{a\}$ , then [neither](A)(B) is undefined, and thus we do not have downward monotonicity (no preservation of truth). Similarly, if we expand *A* to the superset  $\{a, b, x\}$ , then [neither](A)(B) and we do not have upward monotonicity. Thus, [neither] is nonmonotone on its first argument.

# 4 Scalar adjective experimental predictions

The adjective *long* cannot be modified by maximal standard adverbs or minimal standard adverbs. In light of this, on the theory developed by Syrett et al. (2009), what is the expected pattern of behavior (for children and adults) for the prompt 'Hand me the long one' in an experimental condition in which the subject is presented with two sticks, one longer than the other, but neither long in any absolute sense?

**Answer** The adverbial modification data indicates that *long* associates with a totally open scale. Thus, the expected response for 'Hand me the long one' is to hand over the longer of the two sticks. Even though neither stick is long in an absolute sense, participants will set the contextual threshold on length in a way that satisfies the presuppositions of *the long one*.

# 5 Illocutionary effects

In Solan and Tiersma's chapter 'Consensual searches', they review the famous Bustamonte case, in which police officer James Rand asked Joe Alcala "Does the trunk open?" and Alcala replied with "Yes" and then opened the trunk. How might you characterize (i) Rand's intended illocutionary force for his utterance, and (ii) Alcala's perception of Rand's intended illocutionary force, drawing on the properties of illocutionary force given in section 4.2 of the 'Speech acts' handout?

**Answer** It is worth acknowledging right at the start that there will always be a great deal of uncertainty surrounding (i). We have no direct access to Rand's (or anyone else's) intentions. Even our own intentions might be hard to identify and articulate reliably. However, it safe to say that Rand did *not* intend the force of his utterance to be that of a command. That force would likely contravene the Fourth Amendment, since a command from a police officer would be inconsistent with the requirement that consent to search be offered voluntarily. Thus, we might grant that the 'degree of strength' of the illocutionary act needs to be more like a 'request', since the preparatory conditions for a command are not met here – a command would 'misfire' on constitutional grounds.

For (ii), we could in principle ask Alcala what he perceived, and that would be pretty direct evidence. However, absent such a direct report, it seems worth entertaining the idea that Alcala perceived Rand's intended force to be that of a command, albeit one phrased in a polite way. Solan and Tiersma write, "Why, indeed, would any rational person ever agree to let the police search his possessions?" The answer is that rational people can feel unsure of what police officers are empowered to do, especially given the uncertainty surrounding legal precedents in this area. Police officers are empowered to command us to do many other things, so why not this? In our terms, this all traces to uncertainty about the pragmatic presuppositions inherent in speech-act preparatory conditions.

It is also possible that Alcala merely perceived the question to be a request. Assuming the trunk was not obviously damaged in some severe way, the question "Does the trunk open?" has a trivial "Yes" answer, and so that construal of the question is likely to be ruled out by quantity. In such situations, request interpretations of questions like this are very common. If Alcala believed there was nothing incriminating in the trunk (which is easy to imagine, given that the police had to search thoroughly and found only some bad checks), then complying with a request may have seemed like the safest option, given, again, some uncertainty about which speech acts police are empowered to perform.