Exam 1

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

Distributed Feb 8; due Feb 15

Notes and reminders

- This is due on Feb 15, by 9:45 am Pacific. No late work will be accepted outside of our standard grace period.
- You must submit your work electronically via Canvas.
- No collaboration of any kind is permitted. You are, though, free to use your notes and any other reference materials you like.
- Please submit questions on the Ed forum or to the staff email address. Questions sent to individual instructors probably won't be answered in a timely enough fashion to be useful.

1 Modifier diagnosis   [2 points]

Classify the modifier *faulty*, as in *faulty keyboard*, as intersective, subsective, nonsubsective, or privative, according to the typology developed by Partee 1995, and provide justification for your classification. Provide the most restrictive classification you can. Our evaluation will not focus on your linguistic judgments, which are entirely your own in the Jackendoff sense. Rather, we will focus on how you reason in terms of your reported intuitions and the Partee adjective classes. (1–3 sentences.)

2 Novel compounds   [2 points]

In Levin et al.'s free-response comprehension experiment, 19/20 responses for *salad glove* were coded as 'Purpose'. (The one other response was 'Color'.) Is this expected under their account? Say why or why not. In writing your answer, make sure to (1) classify the modifier, the head, and the compound itself as artifact or natural kind, and (2) make meaningful use of the relevant core hypothesis from their paper. (3–4 sentences should suffice.)

3 Functional application   [3 points]

Reduce the following expressions by applying the necessary application and substitution steps. You should reduce the expressions as far as is possible, including subexpressions.

i. $\left(\lambda x(x + x + 4)\right)(5)$

ii. $\left(\lambda y\left(\lambda x(x > y)\right)\right)(4)$

iii. $\left(\lambda f\left(\lambda x(x < f(4))\right)\right)\left(\lambda y(1 + y)\right)$

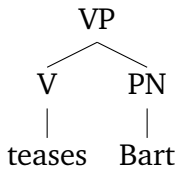# 4   Quantificational determiner   [2 points]

Give a denotation for the quantificational determiner *fewer than four*. (For examples of such denotations, see section 3 of the 'Quantifier properties' handout.)

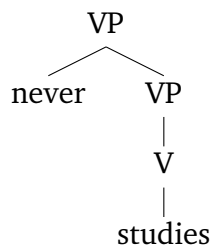# 5   Compositional analysis   [2 points]

For each of the top (root) nodes in the following trees, provide (i) the name of the rule you used to derive that meaning from its constituent parts, according to the handout 'Semantic composition', and (ii) the meaning itself after all the allowable substitutions from function applications. Thus, for example, given the tree on the left, either answer at right would be complete and accurate:
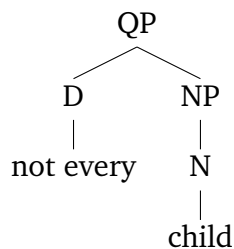
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        VP                           Rule (TV) derives { [Homer] , [Lisa] }
      /    \
     V      PN
     |      |
  teases   Bart
```

5.1

```
        VP
      /    \
   never    VP
            |
            V
            |
         studies
```

5.2

```
          QP
        /    \
       D      NP
       |      |
  not every   N
              |
            child
```

6 A (non-existent) non-conservative determiner [2 points]

Consider the hypothetical quantificational determiner *llarof*:

$$[\![llarof]\!] = \lambda X \Big(\lambda Y \big(\top \text{ if } Y \subseteq X, \text{ else } \mathsf{F} \big) \Big)$$

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 $[\![llarof]\!]$ – and explain why those sets constitute a counterexample. Please do not give your argument in terms of English sentences. Since *llarof* is not a real determiner, such sentences don't make sense and so cannot carry the argument.

7 Where *ever* can appear [2 points]

The English adverbial particle *ever* has a highly restricted distribution. On the basis of the following examples (where * marks ungrammatical cases, as usual), formulate a generalization in terms of the monotonicity properties of determiners about where *ever* can appear:

(7) a. No [NP students who have ever taken semantics] [VP have been to Peru]

b. No [NP students] [VP have ever been to Peru]

c. *Some [NP students who have ever taken semantics] [VP have been to Peru]

d. *Some [NP students] [VP have ever been to Peru]

e. At most three [NP students who have ever taken semantics] [VP have been to Peru]

f. At most three [NP students] [VP have ever been to Peru]

g. Exactly three [NP students who have ever taken semantics] [VP have been to Peru]

h. Exactly three [NP students] [VP have ever been to Peru]

i. Every [NP student who has ever taken semantics] [VP has been to Peru]

j. *Every [NP student] [VP has ever been to Peru]

Please restrict your attention to this set of examples when formulating your generalization, and accept the grammaticality judgments as given (even if you disagree with them).

Note: I've used square bracketing to indicate the basic syntactic structure of these cases. In all cases, the string inside [NP …] corresponds to the restriction of the determiner semantically, and the string inside [VP …] corresponds to the scope of the determiner semantically.