Assignment 3

Chris Potts, Ling 130a/230a: Introduction to semantics and pragmatics, Winter 2025

Distributed Jan 28; due Feb 4

1 What kind of modifier is this? [1 point]

Consider the following (unusual and unlikely) adjective meaning, which I've given the name *remoh* just so we have a name for it:

$$[\![remoh]\!] = \lambda X\Big(U - \Big\{ \quad \Big\}\Big)$$

What is its classification according to the Partee adjective typology? Your answer here can be a single word: intersective, subsective, non-subsective, or privative. Choose the strongest classification that matches the definition. This is not required, but you might provide a brief justification so that we can consider giving you partial credit if your classification is incorrect.

2 A new transitive V [2 points]

Suppose we extend our grammar with the Transitive V *resembles*, defined as

$$[\![resembles]\!] = \lambda y\,(\{y\})$$

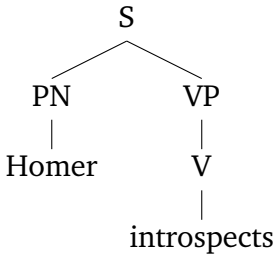
What are the values of the following?

(a) $[\![resembles]\!]\Big($  $\Big)$

(b) T if  $\in [\![resembles]\!]\Big($  $\Big)$, else F

3 Composition [4 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:



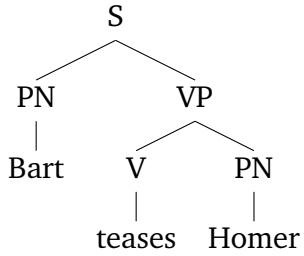
Rule (S) derives T if $[\![Homer]\!] \in [\![introspects]\!]$, else F

Rule (S) derives T if $[\![Homer]\!] \in \{$  ,  $\}$, else F

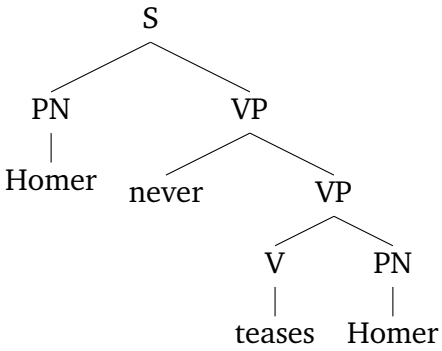
There are typically many equivalent ways of specifying a given meaning. We care only that you specify the correct meaning. High-quality Simpsons drawing are always appreciated but certainly not required.

3.1

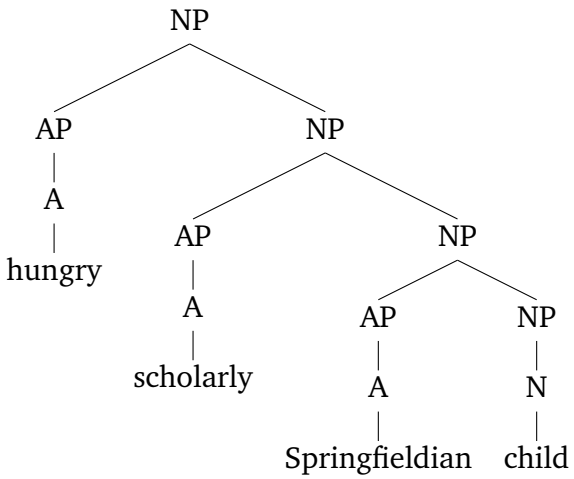
3.2



3.3

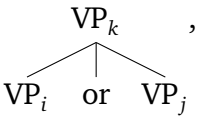


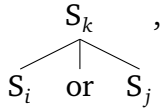
3.4



4 Disjunctions [3 points]

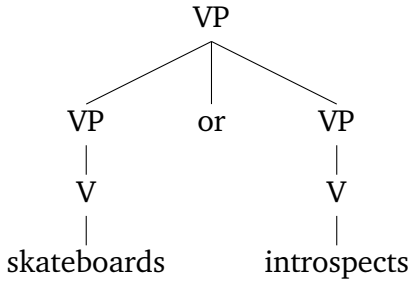
Let's extend our semantic grammar with two new rules for handling disjunction. Rule VPD is for 'Verb-phrase Disjunction', and Rule SD is for 'Sentential Disjunction':

(VPD) Given a syntactic structure  , $[\![\text{VP}_k]\!] = [\![\text{VP}_i]\!] \cup [\![\text{VP}_j]\!]$

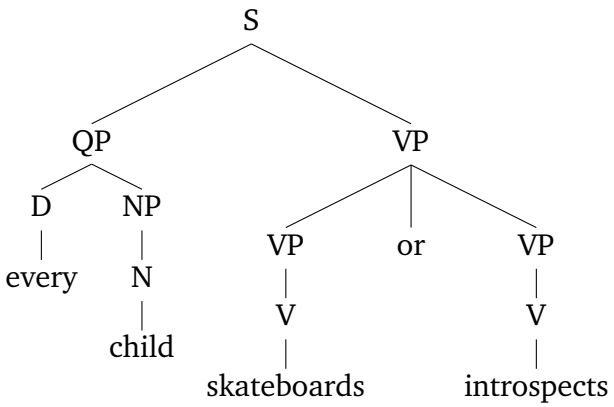
(SD) Given a syntactic structure  , $[\![\text{S}_k]\!] = \top$ if $\top \in \left\{[\![\text{S}_i]\!], [\![\text{S}_j]\!]\right\}$, else F

Using the above meanings, compositionally derive the meanings for the following trees. The instructions here are the same as for question 1: for each tree, you need only report (i) the name of the rule you used to derive the meaning of the root node, and (ii) the meaning of the root node itself after all the allowable substitutions from function applications.

4.1



4.2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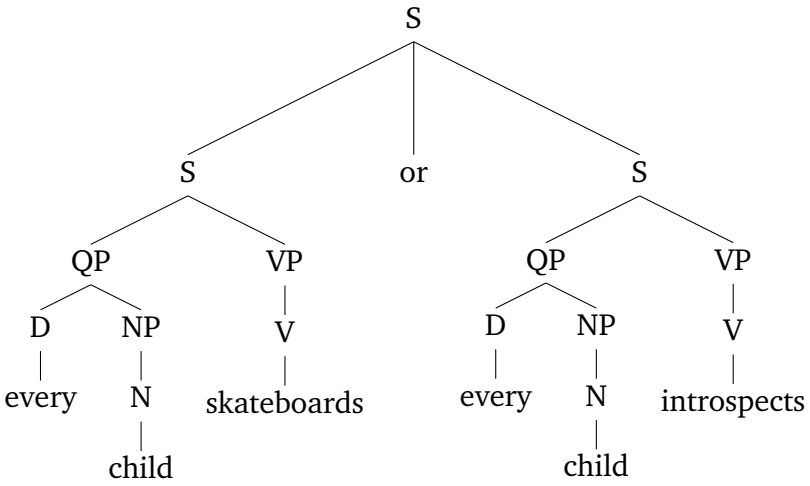
4.3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every
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introspects
child
child