

Lecture 6: More linguistic modeling: TAGs with feature constraints

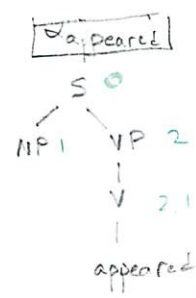
Announcements: webpage updated with no-lecture days, references for yesterday; today

Outline:

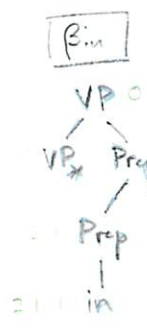
- Today (A): reinforce basic TAG concepts
 - * official definition for assignment: Jashi/Schabes reading, Sect 2 (not 2.1)
 - (B) break for assignment-related introductions and questions
 - (C) feature-based TAGs: motivation = obligatory vs. disallowed modification
 - formalism: inspired by adjunction "splitting a node"
 - idioms remind us of "nifty" semantics-from-derivation tree
- Next 1-2 lectures: some formal properties; parsing intuitions

1. In-class worked example

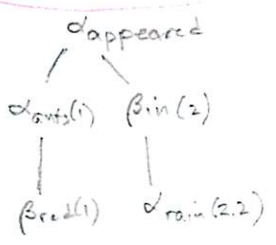
Initial trees:



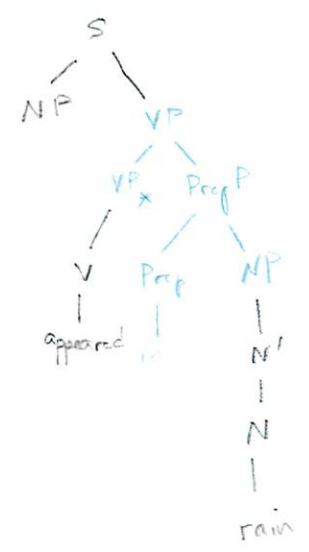
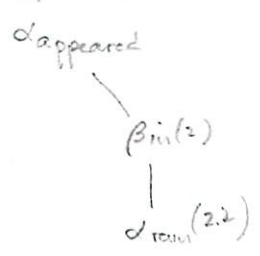
given auxiliary trees



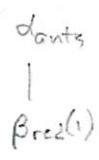
derivation tree



(b) "upper right"

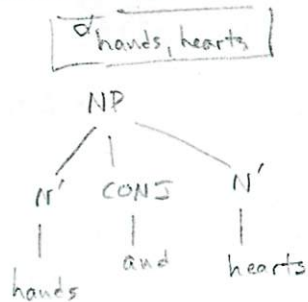


(a) "lower left"



2. Exercise:

initial tree

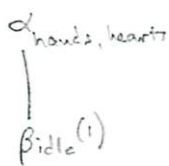


auxiliary tree



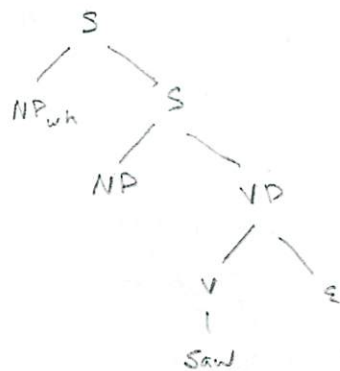
What derived tree corresponds to this derivation tree?

Put your answer here!



3. Sentential modifiers and sentence inversion

- (a) witnesses saw a truck
- (b) what_x do you think witnesses saw?
- (c) what_x did Twitter say witnesses saw?
- (d) * what witnesses saw



4. Idioms (fixed, noncompositional phrases)

- (a) Frodo kicked the bucket = Frodo died? ✓
- (b) Frodo kicked the blue bucket ≠ Frodo died
- (c) Frodo kicked the proverbial bucket = Frodo died? ✓

5. legal feature-based adjunction

partial tree



from above, the tree wants to have features t

what the current features below are.

