

As your starting point, assume the current class grammar, Bob 1.1, given below:

Phrase structure rules

Lexicon

PSR1 $S \rightarrow NP VP$

PSR2 $NP \rightarrow N$

PSR3 $VP \rightarrow V$

PSR4 $NP \rightarrow NP Cj1 NP$

PSR5 $S \rightarrow S Cj1 S$

PSR6 $S \rightarrow S Cj2 S$

$N = \{\text{Sally, Harry}\}$

$V = \{\text{slept, wept}\}$

$Cj1 = \{\text{and}\}$

$Cj2 = \{\text{as}\}$

Now consider the sentences in (1)–(10):

- (1) Harry slept.
- (2) *Harry slept Sally.
- (3) *Harry slept that Sally wept.
- (4) *Harry greeted.
- (5) Harry greeted Sally.
- (6) *Harry greeted that Sally wept.
- (7) Harry thought that Sally slept.
- (8) *Harry thought Sally.
- (9) Harry thought of Sally.
- (10) *Harry greeted of Sally.

Part A (20 points) For each sentence say whether it is generated by Bob 1.1. If it is, give the associated tree structure. If it is not, say why not.

Part B (30 points) Using the methods and reasoning employed when modifying Bob in class, propose a revision of Bob (call it Bob 2.0) that generates (1), (5), (7) and (9), but not (2), (3), (4), (6), (8) and (10). Be explicit about the part of speech of any new words added to the lexicon. In addition to presenting the revised grammar, briefly describe the proposed revisions and the motivation for them.

Part C (16 points) For each of (1), (5), (7) and (9), draw the tree structure that Bob 2.0 yields for this sentence and indicate (either by labelling the branches with the relevant PSR or in a separate paragraph) how each part of the tree is licensed.

Part D (18 points) For each of (2), (3), (4), (6), (8) and (10), say why the sentence is not generated by Bob 2.0. Be as explicit as you can.

Part E (optional, no points) If you have worries about Bob 2.0, e.g. based on certain examples not included in (1)–(10), say what the issues are and why we need to worry about them.

Due Monday April 3 in class