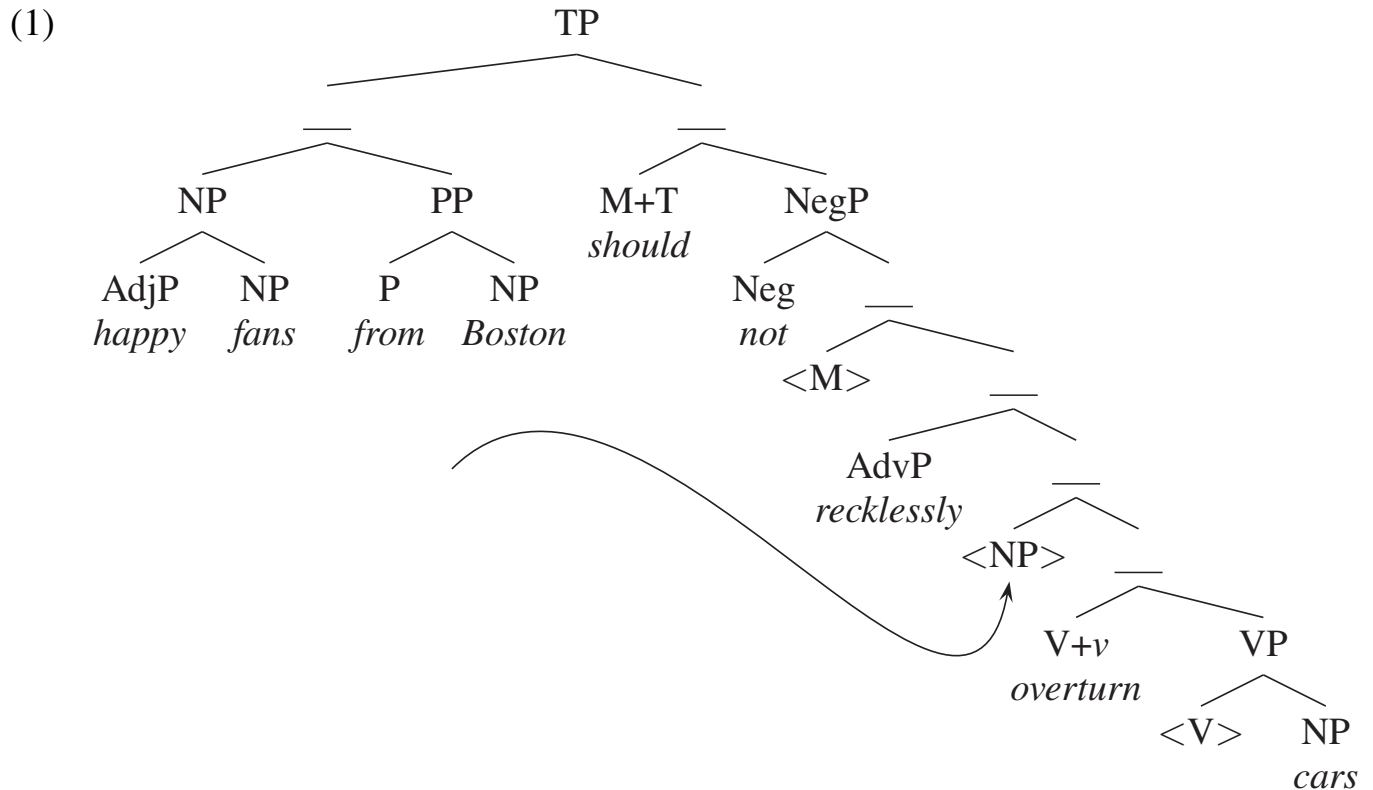


Budget your time. 30 points total. 80 minutes.
 The number of points assigned to each part is indicated by a number in brackets.

1. [6] Fill in the missing labels for the nodes in the tree below. Where a node is the maximal projection of a lexical item, indicate this with the standard “X-bar” notation (e.g., NP for the maximal projection of a noun, *v'* for an intermediate projection of *v*). The sentence is *Happy fans from Boston should not recklessly overturn cars*. The arrow is for use in question 4.



2. [6] Yes or No. In the sentence for which the structure is given in (1)...

- (a) Is *happy fans* a constituent? _____
- (b) Is *fans from Boston* a constituent? _____
- (c) Is *recklessly* a specifier? _____
- (d) Is *Boston* a complement? _____
- (e) Is *happy* an adjunct? _____
- (f) Does *recklessly* dominate *cars*? _____

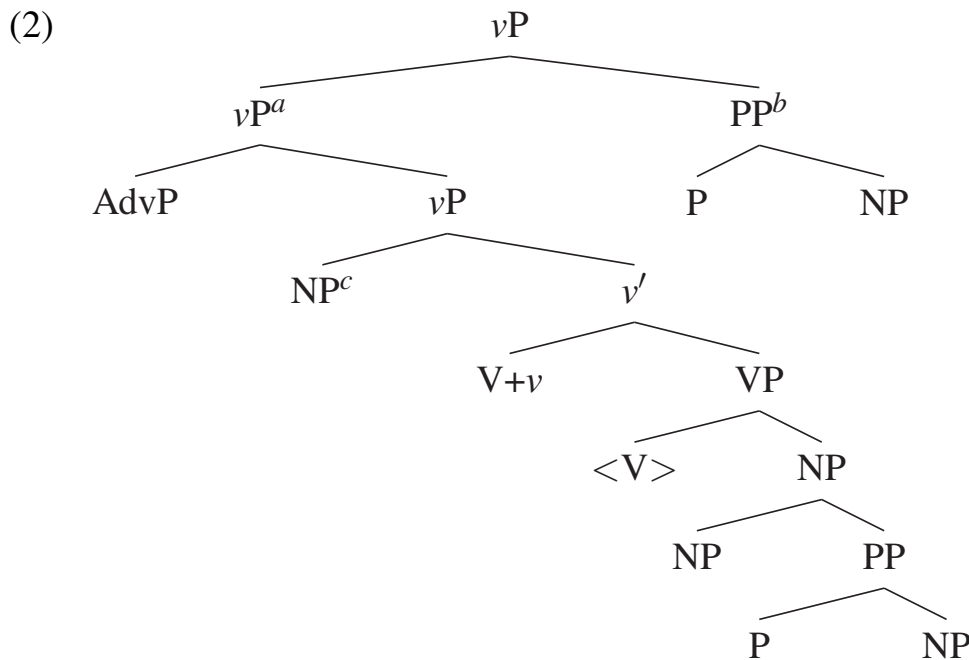
3. [1] **Circle one.** The verb shown in the structure in (1) above is...

ditransitive / transitive / unergative / unaccusative

4. [1] **C-command.** The arrow in the tree above points to a node. Circle every node in the tree that node c-commands.

5. [1] **θ -role.** Name the θ -role that *cars* has in (1). _____

6. Suppose we start building a structure for a sentence, and at a certain stage we wind up with a vP as shown (abstractly) below in (2). *Note:* The superscripts are just for identification purposes—they aren't part of the structure, I just need to be able to refer to the individual nodes.



(a) [1] Name the θ -role that the NP^c has. _____

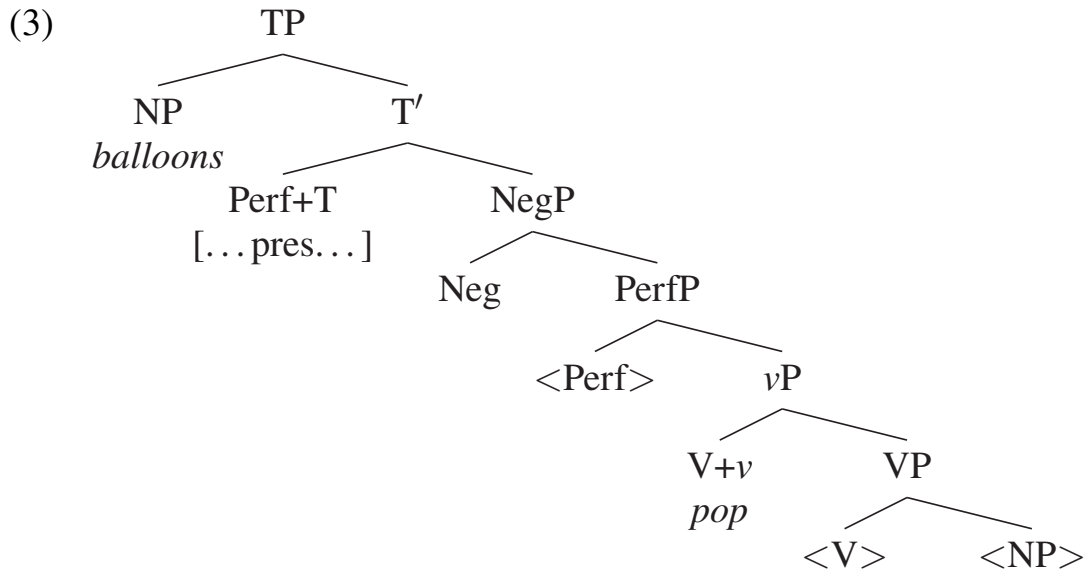
(b) [1] Name the operation (Merge, Adjoin, Move) that connected PP^b and vP^a . _____

(c) [1] How many [uN^*] features were there—total—in these lexical items initially? _____

(d) [1] Which of the following three sentences might plausibly include the vP in (2)?

1. Pat had surreptitiously fabricated money with paper from eBay.
2. Pat was carefully measuring teaspoons of sugar by candlelight.
3. Surprisingly Pat eats nachos with gravy on weekdays.

7. Suppose you had a sentence with the abstract structure given below in (3). I have provided the value for tense and the pronunciation of two lexical items (the NP, *balloons*, and the bare (uninflected) form of the verb, *pop*).



(a) [1] The verb shown in the structure in (3) (above) is...

ditransitive / transitive / unergative / unaccusative

(b) [1] Draw arrows in the tree that show, when things moved, where they moved from and to.

(c) [1] Write the sentence that this would be the structure for.

(d) [1] What was the motivation to Merge <V> and <NP>?

(e) [1] What was the motivation to Merge Neg and PerfP?

8. [4] Binding Theory. Consider the sentences in (4). The main clause has *heard* as its verb, relating the subject (*Mary*) to the sentence representing what Mary heard (*that X stole...*). The first sentence, (4a), can mean two different things. One possible meaning is that Mary heard (somewhere) that Ed unjustly relieved Bill of money. Another possible meaning is that Mary heard from Bill that Ed stole money (from somewhere). The second sentence, (4b), can only have that second meaning (that Mary heard about the stealing from Bill), not the first meaning (that something was stolen from Bill).

- (4) a. $Mary_k$ heard that Ed_j stole money from $Bill_j$.
 (✓ stole from B, ✓ heard from B)
- b. $Mary_k$ heard that he_i stole money from $Bill_i$.
 (✗ stole from B, ✓ heard from B)

(a) [1] In (4a), when the stealing was from Bill, does *Ed* c-command *Bill*? _____

(b) [1] In (4a), when the hearing was from Bill, does *Ed* c-command *Bill*? _____

(c) [2] Explain in a sentence or two (naming the relevant Principle of Binding Theory) what leads to the loss of the missing meaning in (4b).

9. [2] Things left to do. Now consider the sentence in (5). This is not grammatical in English, but we can derive it in our system. The question is simply: **How can (5) be derived?** Ground rules: since the sentence is grammatical, all uninterpretable features need to be checked, the hierarchy of projections must be respected. Consider *loudly* to be an adverb (so it can't be adjoined to *operas* to get *loudly operas* as an NP). You don't need to draw a tree for this. Just write a sentence explaining how the word order in (5) could result from our system (and maybe suggest a possible constraint we could add to rule it out).

- (5) * Pat should not sing loudly operas.