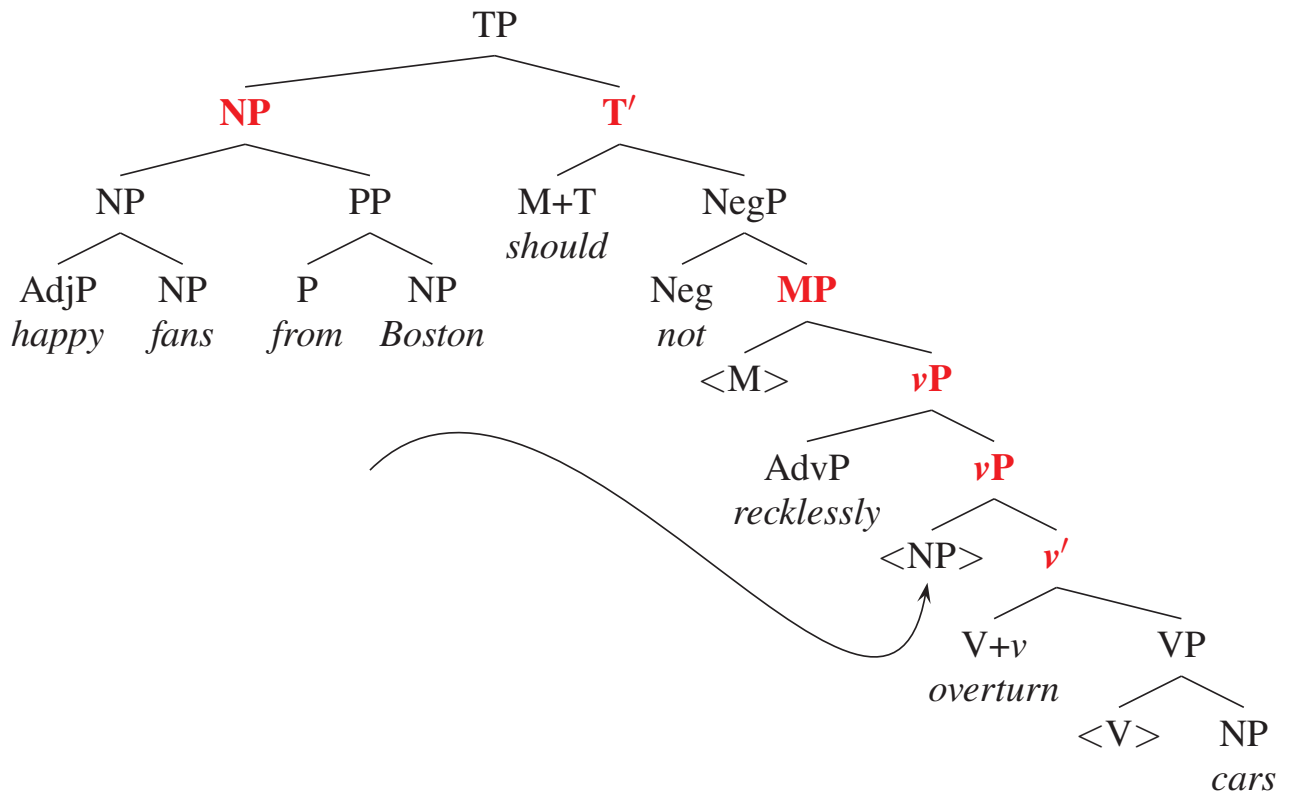


Budget your time. 30 points total. 80 minutes.
The number of points assigned to each part is indicated by a number in brackets.

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.

(1)



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

- (a) Is *happy fans* a constituent? **Yes**
- (b) Is *fans from Boston* a constituent? **No**
- (c) Is *recklessly* a specifier? **No**
- (d) Is *Boston* a complement? **Yes**
- (e) Is *happy* an adjunct? **Yes**
- (f) Does *recklessly* dominate *cars*? **No**

Here, quite a lot of people called *recklessly* a specifier, but it is an adjunct. Similarly, quite a lot of people denied that *happy* is an adjunct, but it is. If you got something wrong in here, just make sure you know why the answer I put here is the right one.

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

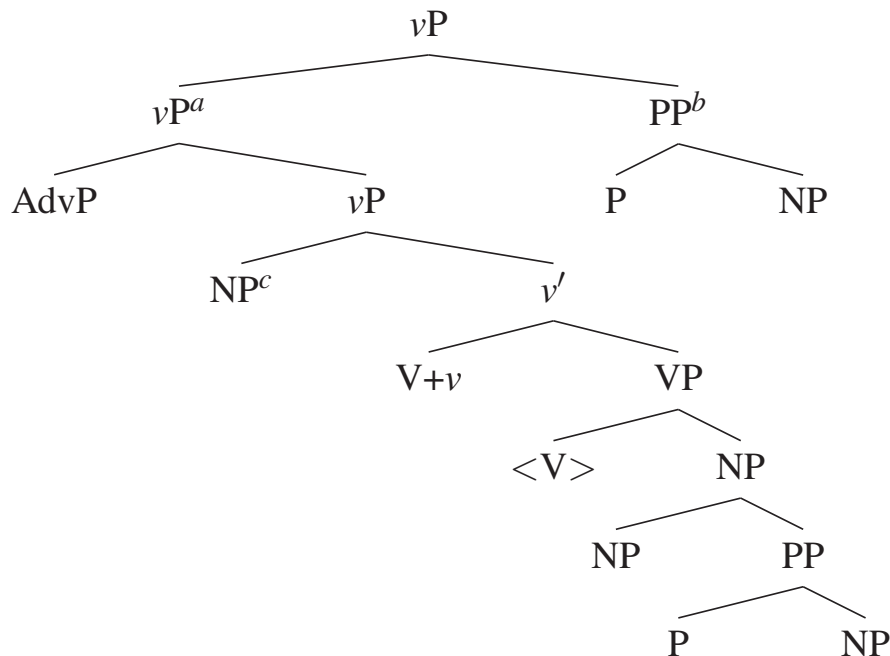
ditransitive / **transitive** / unergative / unaccusative

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). **Theme**

6. Suppose we start building a structure for a sentence, and at a certain stage we wind up with a ν P 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.

(2)



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

Agent

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

Adjoin

(c) [1] How many [$u\text{N}^*$] features were there—total—in these lexical items initially?

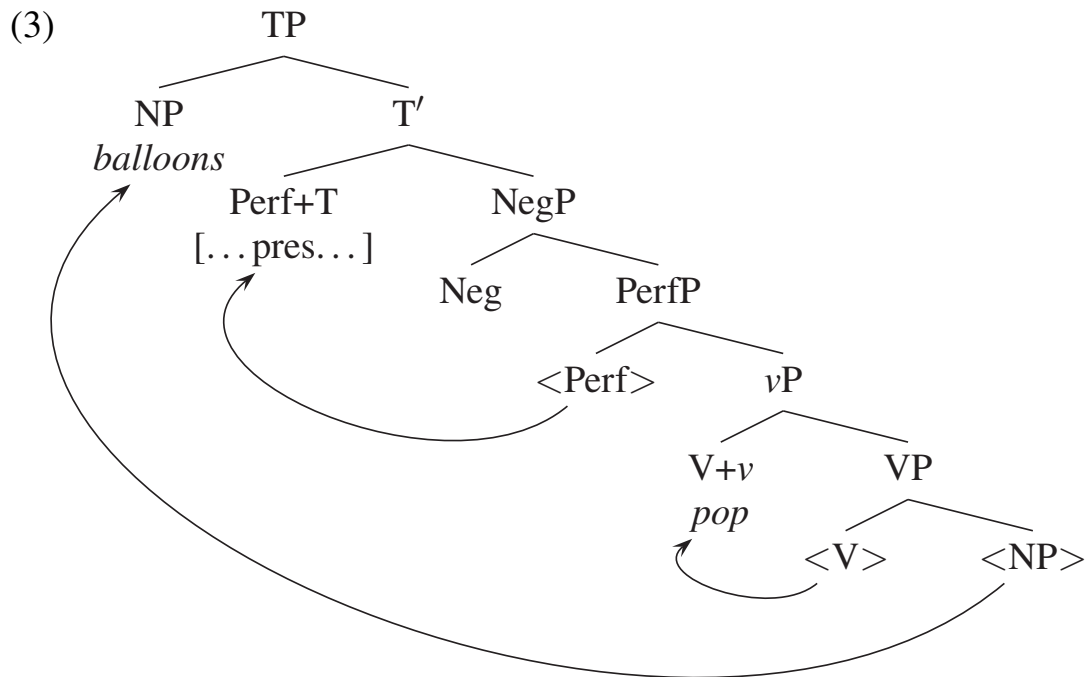
Four

(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.

We talked about this in class a bit, but none of the sentences actually was perfect for (2). The “correct answer” I gave was the second one, and that makes the assumption that *of sugar* is a PP adjoined to *teaspoons*. This is kind of a poor example, because in those cases we might want to consider *of sugar* to be a complement—there are examples in the book at least that treat things like that this way. The third sentence would actually have been closer if we assume that the adverb *surprisingly* could be moved up somehow to adjoin to TP, since everything else is basically correct in the third sentence. Credit was given for picking either sentence two or three.

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.

Balloons have not popped.

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

V had a [μ N*] feature that needed to be checked.

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

The Hierarchy of Projections—PerfP was finished, Neg was next on the Hierarchy.

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 $Bill_i$.
 (✓ 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* ? **Yes.**

(b) [1] In (4a), when the hearing was from Bill, does *Ed* c-command *Bill* ? **No.**

(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). **On the interpretation where the stealing is from Bill, then *he* binds *Bill*, in violation of Principle C. So the interpretation where the stealing is from Bill is ruled out, leaving only the interpretation where the hearing was from Bill.**

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.

The question here could probably have been clearer. The simple answer to how this can be generated is: Adjoin *loudly* to VP. Then V moves over it to head-adjoin to *v*, and you get the order in (5). So, what we might want to do is restrict adverbs to adjoin only to *vP* (and not to VP). Not that many people completely got what I was getting at here. I tried to give at least partial credit here for things that were in the same ballpark or were reasonable.