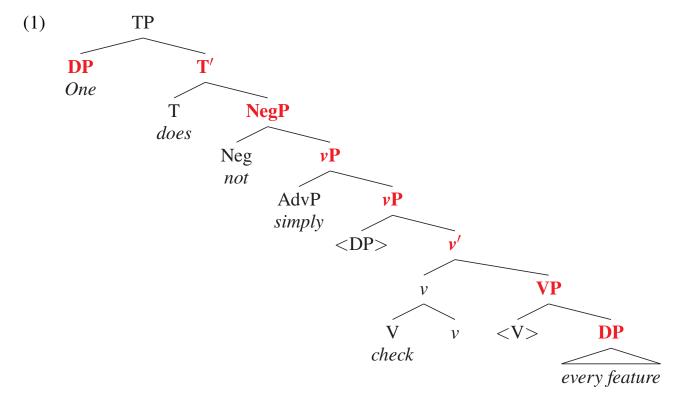
1. [4] Fill in the missing labels for the nodes in the tree below. Use the standard "X-bar" notation (e.g., NP, v', etc.).



2. [4] Yes or No. In the sentence for which the structure is given in (1)...

(a) Is One an Experiencer?

No

(b) Is every feature a complement?

Yes

(c) Is *not* an adjunct?

No

(d) Is *One* occupying a specifier?

Yes

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

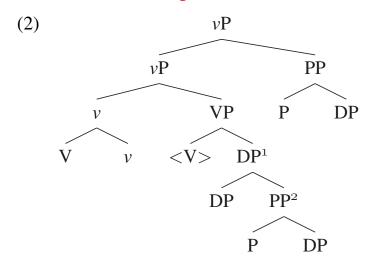
ditransitive / transitive / unergative / unaccusative

4. [1] θ -role. Name the θ -role that *every feature* has in (1).

Theme

5. 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 there in the structure, I just need to be able to refer to the individual nodes.

Ok, on this: This is an unaccusative verb, it has just a Theme (DP¹). The Theme has PP² adjoined to it. So, DP¹ would be something like aliens in movies, water on mountains, people under stress. None of the available sentences differentiated the DP on this point. The differentiation had to do only with the θ -role that the DP got. Shoot is arguably a transitive verb as used here, but in any event, the subject is an Agent, so it is incompatible with the tree in (2). Similarly, drive is an unergative (intransitive, with an Agent), and so that too is incompatible with the tree in (2). Boil, on the other hand, is unaccusative. It's only argument is a Theme, and so that's why Water on mountains boils with vigor is the correct choice.



(a) [1] Name the θ -role that the DP¹ will have.

Theme

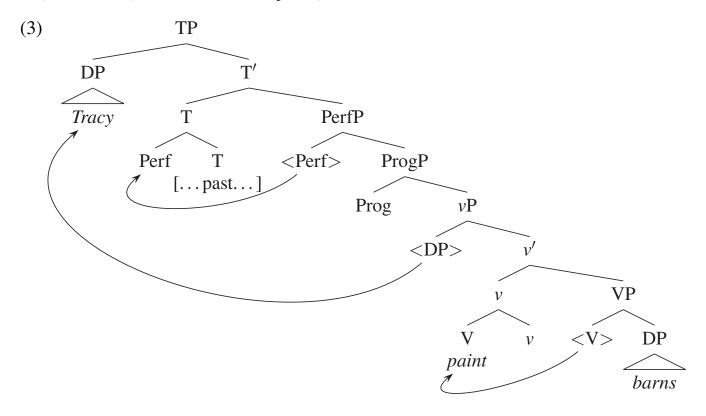
(b) [1] Name the operation (Merge, Adjoin, Move) that incorporated PP² into the structure.

Adjoin

- (c) [1] How many $[uP^*]$ features were there—total—in these lexical items initially? None
- (d) [1] Which of the following three sentences might plausibly include the vP in (2)?
 - 1. Aliens in movies shoot at people.
 - 2. Water on mountains boils with vigor.
 - 3. People under stress drive in circles.
- **6.** [1] Circle one. The verb shown in the structure in (2) is...

ditransitive / transitive / unergative / unaccusative

7. Suppose you had a sentence with the abstract structure given below in (3). I have provided the pronunciation of four syntactic objects: the DPs (*Tracy* and *barns*), and the bare (uninflected) form of the verb (*paint*).



(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, for things that moved, where they moved from and to.
- (c) [1] Write the sentence that this would be the structure for.

Tracy had been painting barns.

(d) [1] What was the motivation to Merge Prog and vP?

Hierarchy of Projections

(e) [1] What was the motivation to Merge T' and DP (Tracy)?

EPP, strong $[uD^*]$ feature of T

9. [4] Binding Theory. One question, about the sentences in (4) and (5) below. The question (as you will explore in the real questions a–d below) is this: Why does (5b) have only one of the two interpretations you might expect? The background is this: There are two kinds of *give* sentences, the kind with the prepositional goal (4a), and the "double object construction" (4b). Both sentences in (4) seem to mean basically the same thing, and have the same options. Some male won a prize and Bill received the prize from Sue. The prizewinner can be Bill, or somebody else.

The similar-looking pair of sentences in (5) don't have as many meaning possibilities. Bill won a prize, and some male received it from Sue. However, the one who receives the prize can be Bill or somebody else in (5a), but it *cannot* be Bill in (5b). The question here is asking you to explain why Bill can't be the one who receives the prize from Mary in (5b). *Hint:* The title of this question is "Binding Theory"—expect to find yourself using the word "Principle" and one of the capital letters "A," "B," or "C."

- (4) a. Sue gave the prize that he won to Bill.
 - b. Sue gave Bill the prize that he won.
- (5) a. Sue gave the prize that Bill won to him.
 - b. Sue gave him the prize that Bill won.

- \leftarrow *him* cannot be Bill.
- (a) [1] In (4a), does *he* bind *Bill* if they have the same index? No, *he* does not command *Bill*.
- (b) [1] In (4b), does *Bill* bind *he* if they have the same index? Yes, *Bill* c-commands *he*.
- (c) [1] Why doesn't (4b) violate Principle B even when *he* and *Bill* have the same index? *Bill* is not within the binding domain of *he*, so Principle B doesn't care that *Bill* binds *he*.
- (d) [1] Why can't *him* be *Bill* in (5b)? It would violate Principle C, since *him* c-commands *Bill* and, even though *him* is outside the binding domain of *Bill*, Principle C doesn't care about binding domains, but requires that R-expressions like *Bill* are completely free. So, since *him* c-commands *Bill*, they can't be coindexed, or Principle C would be violated.

We talked through this in class, mostly. But the thing to remember (for any question that asks about "binding") is that "binding" is *defined* like this: X binds Y if X commands Y and X is co-indexed with Y. In particular, the binding domain does not enter into it—binding occurs no matter what the binding domain is. However, the Principles of Binding Theory do care about the binding domain.

So, in (4a), he does not bind Bill because he does not c-command Bill, so one of the defining properties of binding is absent. Whether co-indexed or not, they are not in a binding relationship. For (4b), Bill does c-command he and so if they are co-indexed, Bill will bind he. However, because he is inside a smaller clause that doesn't contain Bill, the fact that Bill binds he is not a problem.

I'm not really sure why I had the last question be worth 2 points while the rest of them were worth 1 point, given that the task is not significantly more challenging than the tasks that came before it. But, nevertheless, I counted it as two points.

10. [2] It seems to me (right now, at least) that the two sentences together in (6) can in fact relate to two books written about Björk, one by John and the other by Björk herself. Notice that the second sentence is incomplete—the vP is left unpronounced, and is understood to mean the same thing as the vP in the preceding sentence (this kind of omission of the verb phrase is called "VP ellipsis"). Another example of VP ellipsis can be seen in (7). When (7b) follows (7a), it is understood as communicating (7c).

Here's the question: Given what (6b) means, explain why it is surprising that it is grammatical. (You can ignore *too*, but it is assumed to be adjoined to TP, very high in the tree.)

- (6) a. John could write a *book* about Björk $_i$.
 - b. She_i could too.
- (7) a. John has ordered a pizza.
 - b. Mary has too.
 - c. Mary has ordered a pizza too.

We also talked through this in class. The idea I had in mind here was that what is weird about (6b) is that if you were to pronounce it in full (that is, if you did not use VP ellipsis), the sentence would be ungrammatical (by virtue of being a Principle C violation). Why it's ok to "hide" a Principle C violation by using VP ellipsis is a mystery that I was not expecting you to address, though a couple of people provided some speculations.

The idea I had in mind was not simply that VP ellipsis is possible, I was taking that as a given. A couple of people did suggest that what was surprising here was that

it was missing things (e.g., v) that the Hierarchy of Projections tell us are necessary. Since the question was pretty open-ended, I generally gave credit (or partial credit) for answers of this sort as well.