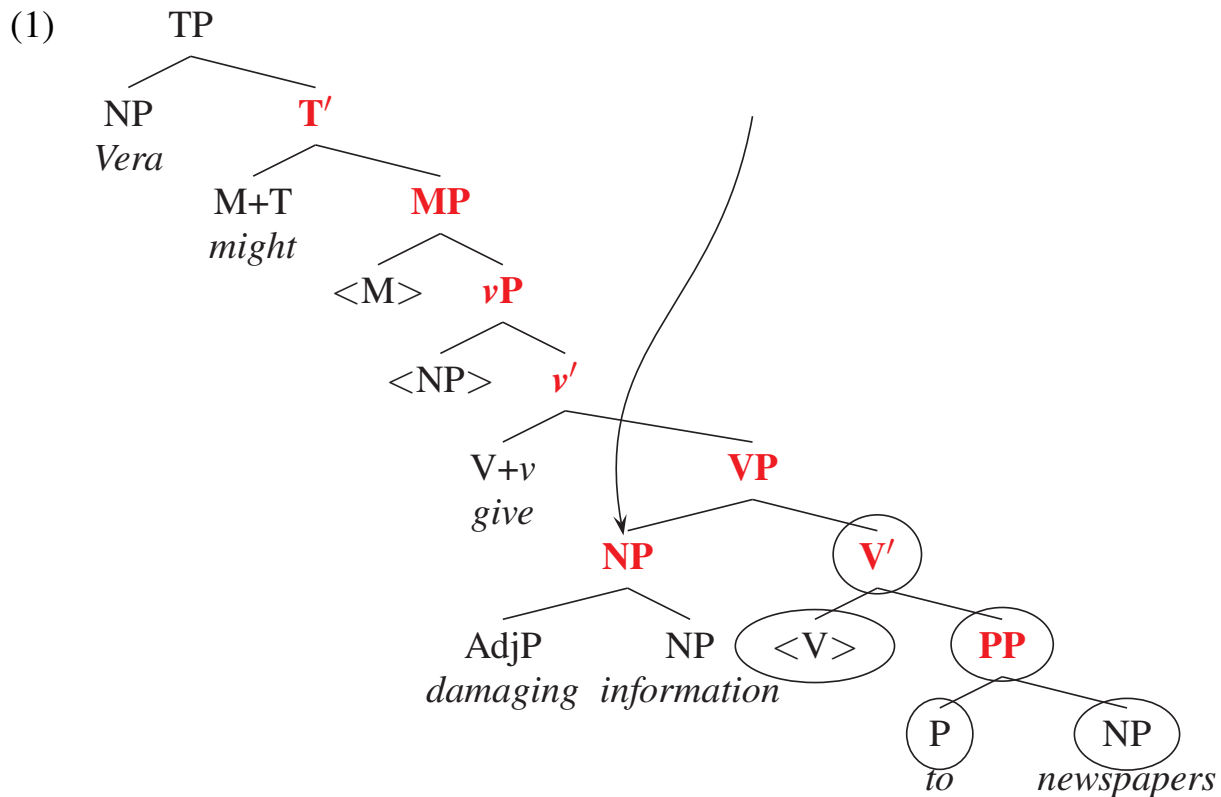


**Budget your time. 32 points total. 80 minutes. Aim for 2.5 minutes/point.**  
*The number of points assigned to each part is indicated by a number in brackets.*

Grade scale. Percentagewise, this is in bands of 7%, but the way the whole numbers work out is as follows. Read the following as “*number or above: grade*”: 30 A, 28 A–, 26 B+, 24 B, 21 B–, 19 C+, 17 C, 15 C– . . .

**1. [8] 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 *Vera might give damaging information to newspapers*. The arrow is for use in question 4.



There were a couple of labeling issues, but mostly these were fine. I don't have much guidance to offer except to just make sure, if you missed one of these, to figure out why they are the way I have them rather than the way you had them.

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

- (a) Is *give damaging information* a constituent? **No**
- (b) Is *damaging information to newspapers* a constituent? **Yes**
- (c) Does *Vera* dominate the NP *newspapers*? **No**
- (d) Does VP dominate the NP *information*? **Yes**
- (e) In the VP, is PP the complement? **Yes**
- (f) Is AdjP the specifier of the NP *information*? **No**

Here too, things were mostly ok, but a few people made errors here and there. As with the previous section, just make sure you know why the answer I have here is the right one for any that you missed.

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

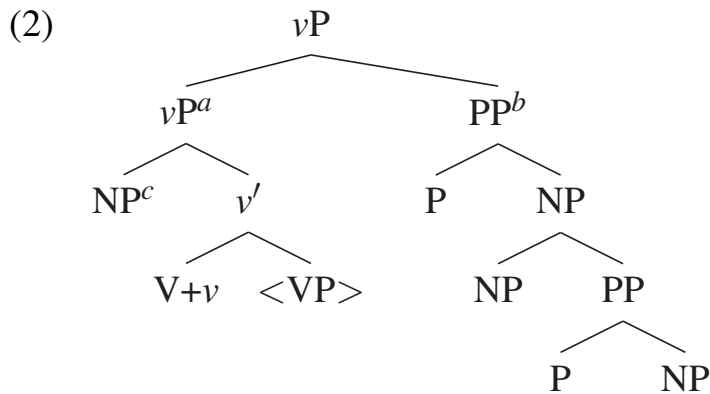
ditransitive / transitive / unergative / unaccusative

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]  **$\theta$ -role.** Name the  $\theta$ -role that *damaging information* has in (1). **Theme**

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.

Ok, on this: This is an unergative verb—it has just an Agent (though the UTAH does not really differentiate well between Experiencers and Agents, so if you said Experiencer that would be ok). A few people missed some of the questions here and there. There were three [ $uN$ ] features: one on each P, and one on  $v$ . The structure of the sentence has one PP inside another, so *in chairs with arms* is the only sentence that is really compatible with this structure.



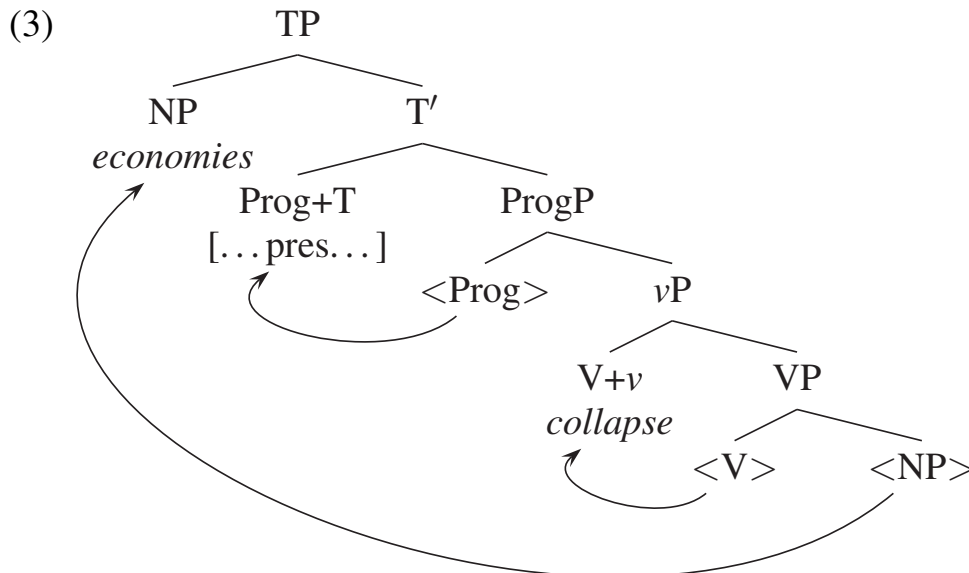
- (a) [1] Name the  $\theta$ -role that the  $\text{NP}^c$  will have. **Agent**
- (b) [1] Name the operation (Merge, Adjoin, Move) that connected  $\text{PP}^b$  and  $v\text{P}^a$ . **Adjoin**
- (c) [1] How many [ $u\text{N}$ ] features were there—total—in these lexical items initially? **Three**
- (d) [1] Which of the following three sentences might plausibly include the  $v\text{P}$  in (2)?
1. Steve played with phones for hours.
  2. Employees tested out phones in bars.
  3. **Steve worked in chairs with arms.**

7. [1] **Circle one.** The verb shown in the structure in (2) is...

ditransitive / transitive / **unergative** / unaccusative

8. Suppose you had a sentence with the abstract structure given below in (3). I have provided the pronunciation of two lexical items (the NP, *economies*, and the bare (uninflected) form of the verb, *collapse*).

There were a couple of people who didn't quite see that Prog is a form of *be* that puts the verb in the "present participle" form (*collapsing*). And for the most part, people got the motivations for Merging right. If you missed one or both of these, make sure you figure out why my answer is the right one.



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

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

**Economies are collapsing.**

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

**The Hierarchy of Projections—vP was finished, Prog was next on the Hierarchy.**

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

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

**9. [5] 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. ← *him* cannot be Bill.

(a) [1] In (4a), does *he* bind *Bill* if they have the same index? **No, *he* does not c-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) [2] 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 co-indexed, 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* c-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”).

**Here’s the question:** Given what the second sentence means, explain why it is surprising that it is ok. (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<sub>i</sub>.  
b. *She*<sub>i</sub> could 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.