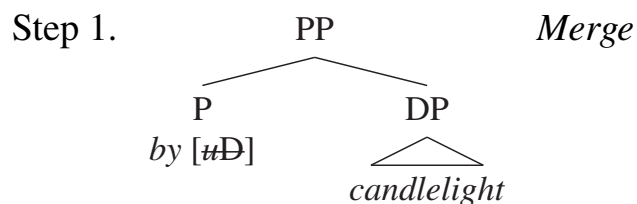> **Derivations and trees.** Construct derivations for the *v*Ps in the following sentences. Include category features and uninterpretable features (see notes below). I'll provide one example of what I have in mind here.
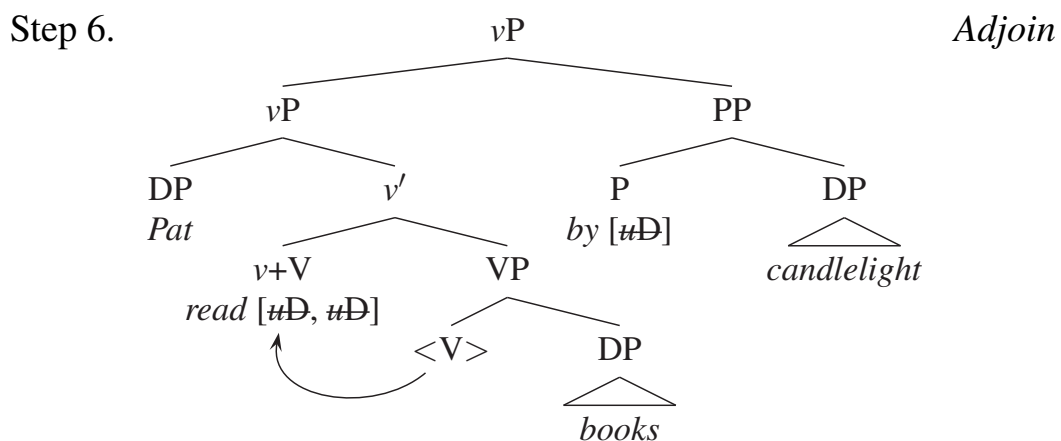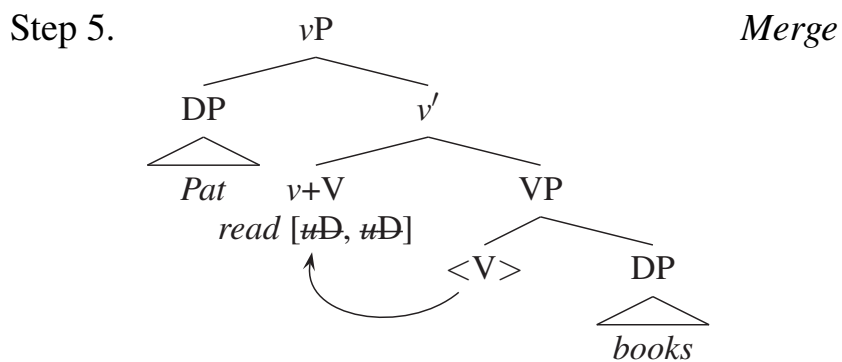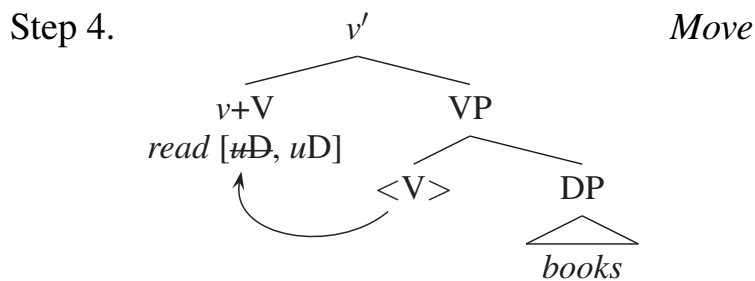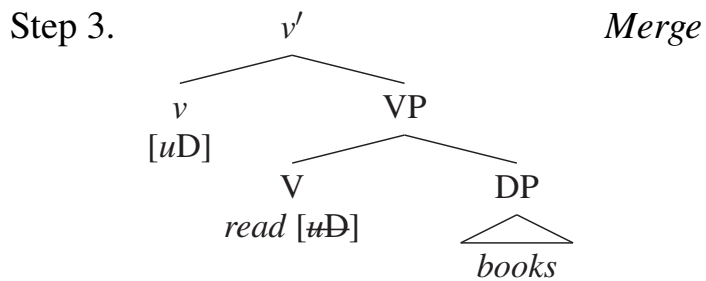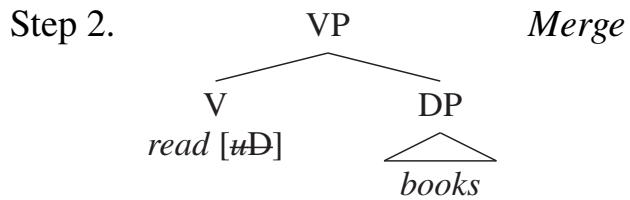
Notes:

- Include category features and uninterpretable features, no others (so, no plural features).

- Write the operation (Merge, Adjoin, Move) that happened in each step.

- For *category* features, use the node label (e.g., don't write [D], but use D or DP as the node label).

- For something like *books* below, you have special permission to write it as a DP without internal structure (i.e. with a triangle). We'll get to the internal structure of DPs soon.

- For the step where you build the node that will be *v*′, go ahead and write *v*′ (instead of *v*P)—we know it can't end up as *v*P, because it still has an uninterpretable [*u*D] feature.

- Cross out uninterpretable features as they are checked.

- You can cross out the features on the terminal nodes (rather than on the non-terminal nodes. It's a bit less confusing.

- Write *gave* as *gave* (rather than as *v*+*have* or *v*+*go*).

Example:

I. Pat read books by candlelight.

Step 1.   PP   *Merge*

```
            PP
          /    \
         P      DP
      by [uD̶]    /\
             candlelight
```

Step 2.   VP   *Merge*

V   DP
read [uD]

books

Step 3. v' *Merge*

v VP
[uD]

V   DP
read [uD]

books

Step 4. v' *Move*

v+V   VP
read [uD, uD]

<V>   DP

books

Step 5. vP   *Merge*

DP v'

Pat v+V   VP
read [uD, uD]

<V>   DP

books

Step 6. vP   *Adjoin*

vP   PP

DP v' P   DP
Pat   *by* [uD]

v+V   VP   *candlelight*
read [uD, uD]

<V>   DP

books

Yours to do: (*Note*: For (3), the meaning must be the natural one: the transcripts were about plans, the reading was with concern.)

(1) Carrie gave papers to Brody.

(2) Brody gave Carrie information.

(3) Saul read transcripts about plans with concern.

(4) Ducks quacked beside Gilbert.

Binding Theory.   One overarching question, about the sentences in (5) and (6) below. The question (as you will explore in the real questions a–d below) is this: **Why does (6b) 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 (5a), and the "double object construction" (5b). Both sentences in (5) 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 (6) 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 (6a), but it *cannot* be Bill in (6b). The question here is asking you to explain why Bill can't be the one who receives the prize from Mary in (6b). *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."

Also, note that the phrase *the prize that he won* is complex. We don't really know how to draw this structure, however, we do know a few things about it. One is that it is a constituent, standing in a place where noun phrases go. Another is that inside this constituent is an entire clause (a relative clause), a whole sentence basically, with tense and everything. *The prize that he won*, or *The prize that John says Mary bought in Texas four years ago*, etc. Even if you can't draw the tree for that, knowing this much should enable you to answer these questions.

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

(6)   a. Sue gave the prize that Bill won to him.
      b. Sue gave him the prize that Bill won.   *← him* cannot be Bill.

a. In (5a), does *he* bind *Bill* if they have the same index?

b. In (5b), does *Bill* bind *he* if they have the same index?

c. Why doesn't (5b) violate Principle B even when *he* and *Bill* have the same index?

d. Why can't *him* be *Bill* in (6b)?