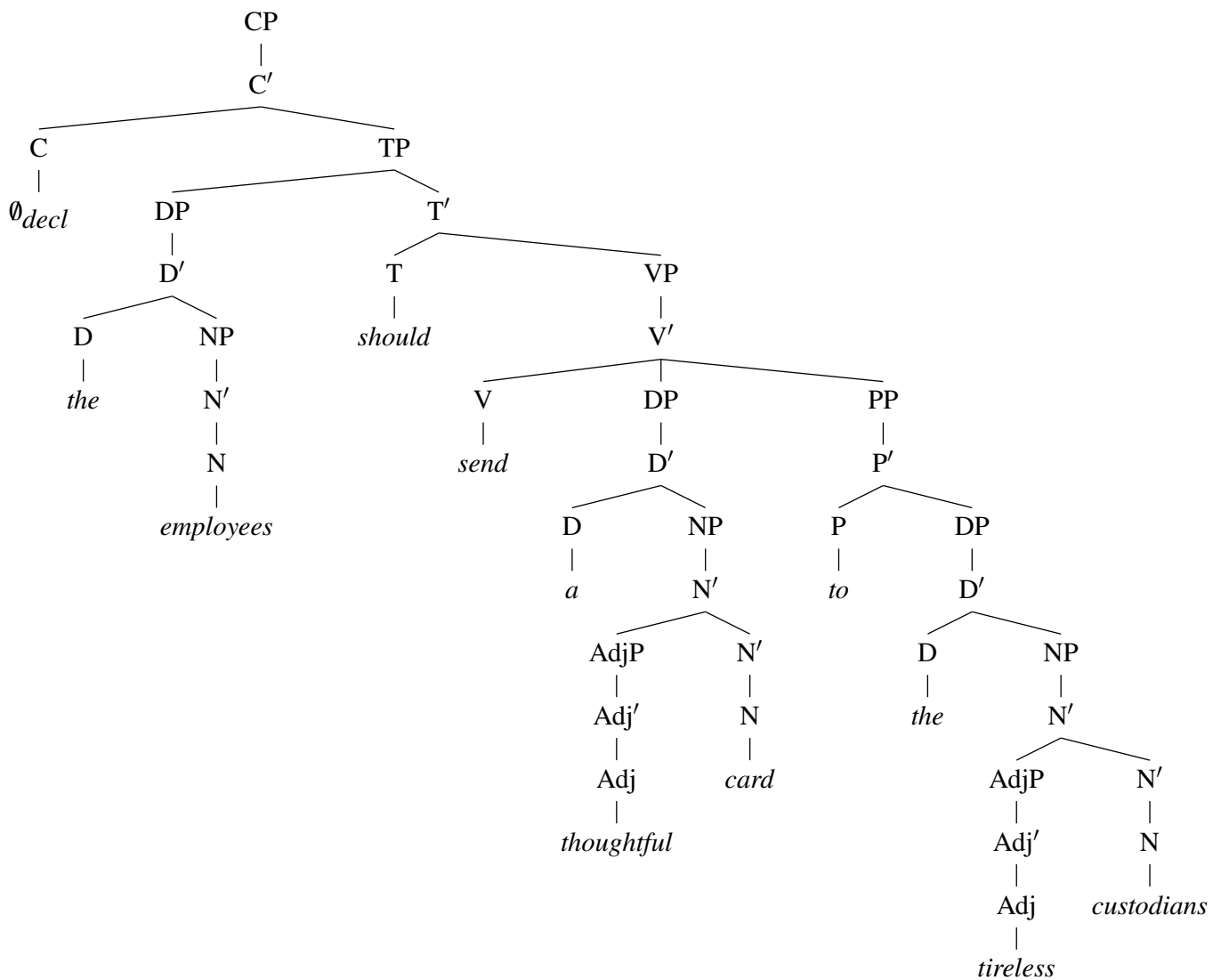


1 From trees to rules and *vice versa* (10 points; 5 points per task)

1.1 Tree to PS rules

Provide the PS rules that derive the following tree. Give the simplest rule system you can, avoiding redundancy. **For this question, just give the lexical items with their category (no other features).**



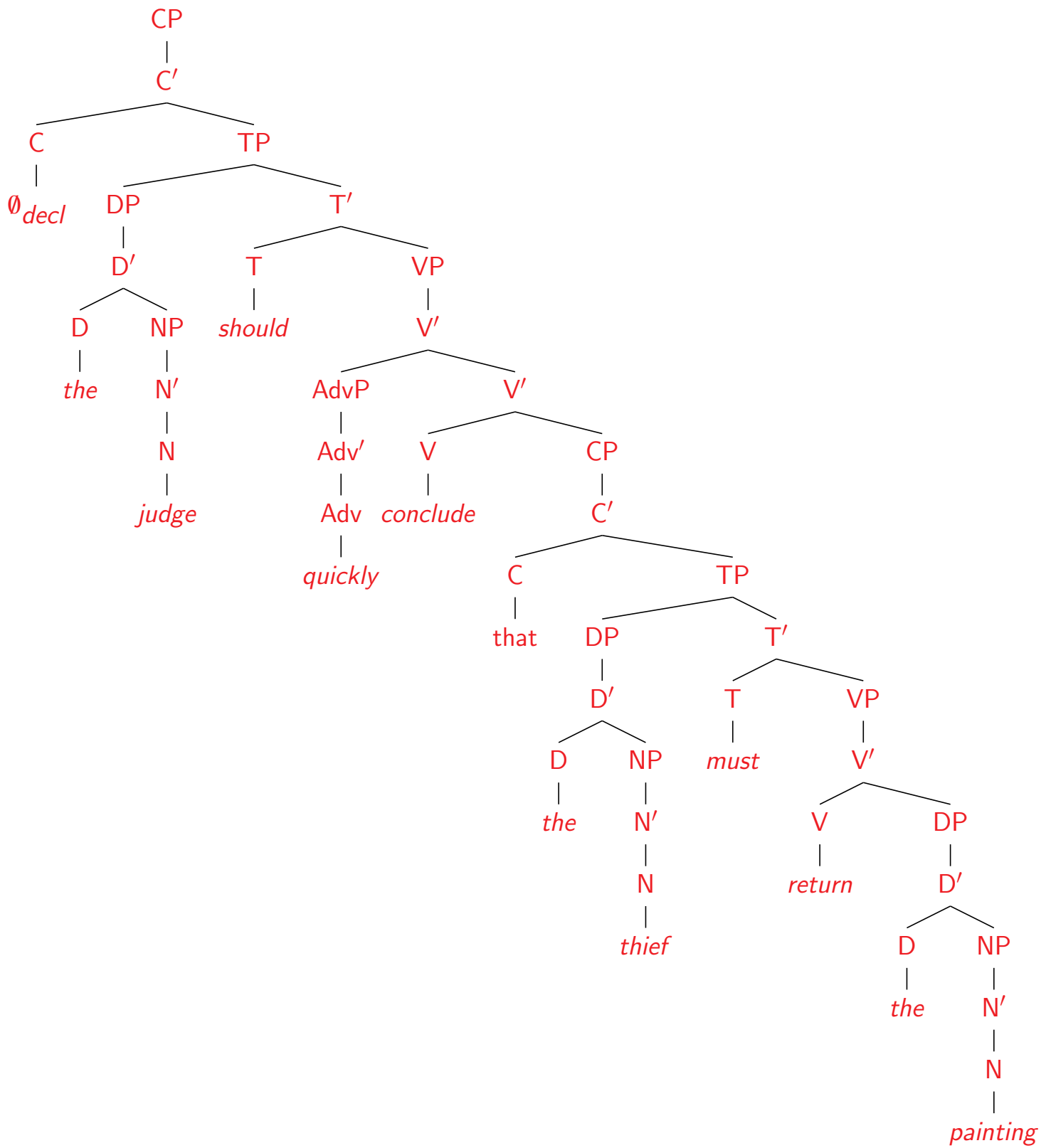
$CP \rightarrow C'$ $C' \rightarrow C TP$ $TP \rightarrow DP T'$ $T' \rightarrow T VP$ $VP \rightarrow V'$ $V' \rightarrow V DP PP$ $PP \rightarrow P'$ $P' \rightarrow P DP$ $DP \rightarrow D'$ $D' \rightarrow D NP$ $NP \rightarrow N'$ $N' \rightarrow N$ $N' \rightarrow AdjP N'$ $AdjP \rightarrow Adj'$ $Adj' \rightarrow Adj'$	$should, T$ \emptyset_{decl}, C to, P $send, V$ $tireless, Adj$ $thoughtful, Adj$	$card, N$ $employees, N$ $custodians, N$ a, D the, D
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1.2 PS rules to tree

Provide a tree diagram for the following sentence based on the grammar below. (Assume the lexical items that would be appropriate.) You may find that the rule system allows for more than one possible structure. If so, provide the structure that best captures the meaning of the sentence. The root node of the tree should be CP.

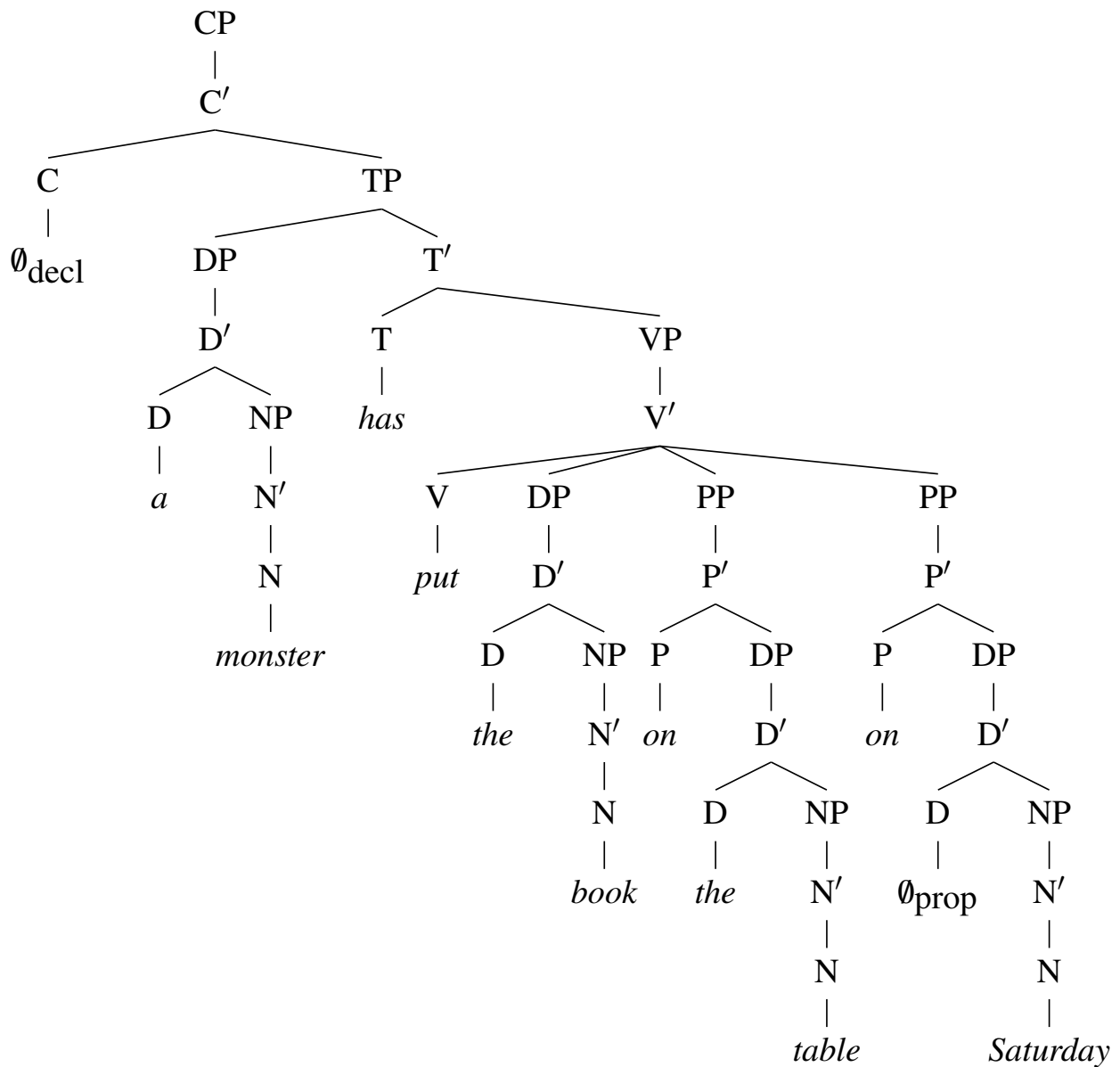
The judge should quickly conclude that the thief must return the painting.

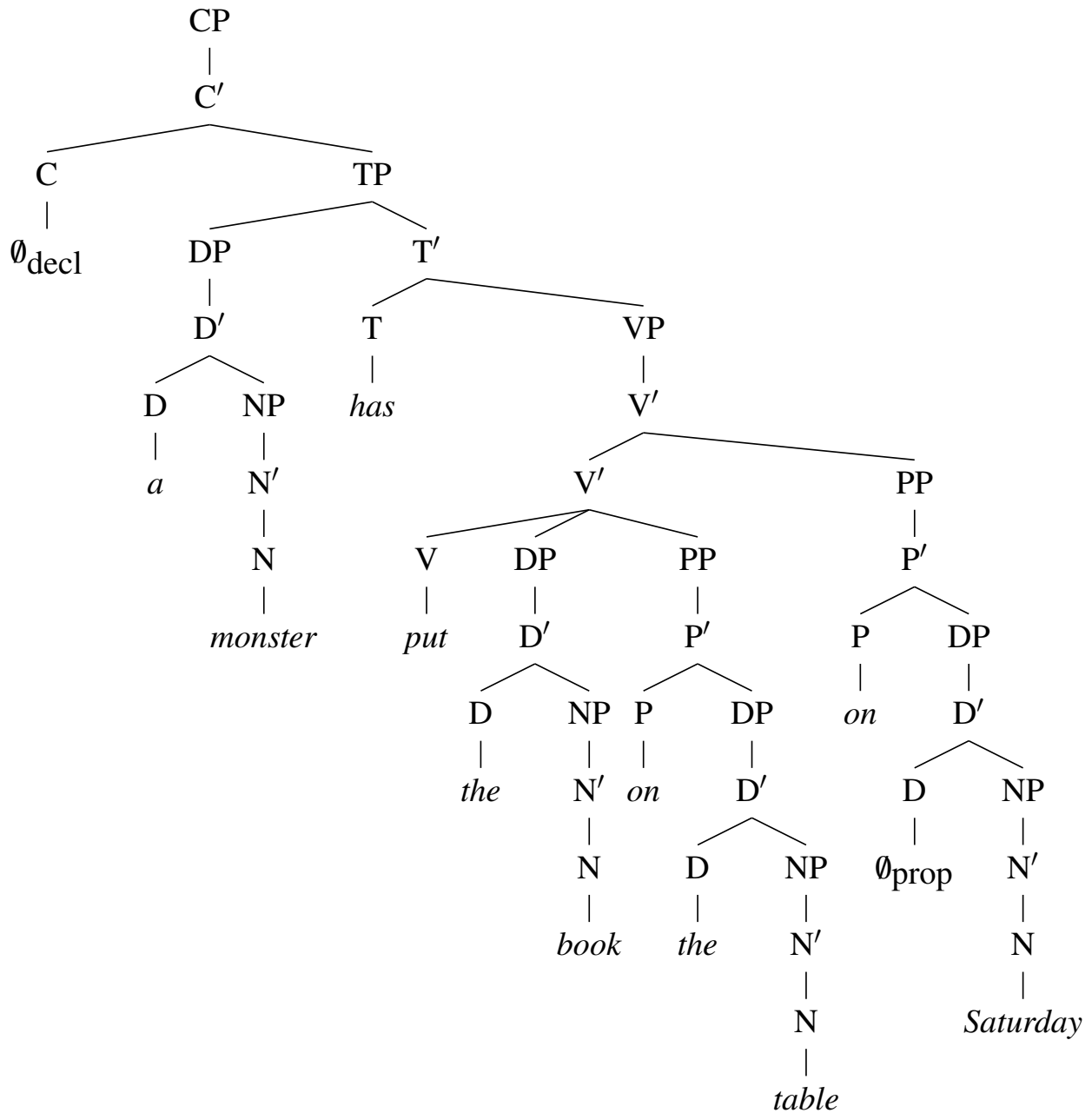
$CP \rightarrow C'$ $C' \rightarrow C TP$ $TP \rightarrow DP T'$ $T' \rightarrow T VP$	$DP \rightarrow D'$ $D' \rightarrow D NP$ $NP \rightarrow N'$ $N' \rightarrow N$ $AdvP \rightarrow Adv'$	$VP \rightarrow V'$ $V' \rightarrow AdvP V'$ $V' \rightarrow V DP$ $V' \rightarrow V CP$
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2 Developing an argument (5 points)

Consider these two hypotheses concerning the structure of the sentence *A monster has put the book on the table on Saturday*.





Task. Which of these diagrams better represents the structure of the sentence? Characterize the difference between them and use at least two tests to show which one seems to be correct.

The difference between the two trees is that the PP *on Saturday* is a complement in the first tree and an adjunct in the second. So the question boils down to whether *on Saturday* is observationally a complement or an adjunct.

If it were an adjunct, we would expect it would be optional, of a type that can be iterated, would necessarily come outside any complements. So those are the kinds of test you would use.

- i. A monster has put the book on the table.

- ii. * A monster has put the book on Saturday on the table.
- iii. A monster has put the book on the table on Saturday at noon.
- iv. A monster has put the book on the table at noon on Saturday.

It is optional, since (i) is grammatical. It cannot be re-ordered with *on the table* (ii), which suggests at least both that *on the table* is a complement and that *on Saturday* is an adjunct. It can be iterated, basically. It's hard to find something very close to *on Saturday* in meaning without it sounding contradictory and weird. But *at noon* is kind of making the same sort of modification semantically, and it can occur with *on Saturday*, and, indeed occur on either side of *on Saturday*.

You can also see if *put the book on the table* is a constituent, since it is a constituent in the second tree, but not in the first tree.

- v. A monster has put the book on the table on Saturday, and a mobster has too on Friday.
- vi. It is put the book on the table that a monster did on Saturday.
- vii. A monster has put the book on the table and yodeled on Saturday.

So in (vi), you can elide *put the book on the table* and leave *on Saturday/Friday* outside. Suggesting that this V' is a constituent that excludes *on Saturday/Friday*. The sentence does sound a bit clumsy though. You can also kind of cleft the verb phrase without *on Saturday*, and you can coordinate two verb phrases under *on Saturday*. With the constituency tests, there is nuance here, but essentially what these are pointing to is that the lower V' drawn in the second tree above is a constituent, so that makes the second tree more accurate than the first.

[Side note 1: I tried to make this problem compatible with the possibility that judging English sentences might not be equally straightforward for everyone, particularly for those whose native language is not English. So, the reason for writing the tests down is that the outcome of the tests determine the conclusion of the argument, and so if I know the tests and the judgments being relied on, the conclusion might come out differently but still be a correct application of the tests, and in that case it counts as correct.]

[Side note 2: In these trees, I put *has* in T. This is not obviously correct, it's correct with a kind of nuance that we'll get to after the midterm. In the present context, the decision to put *has* in T has no bearing on anything, though, because the task is to determine which of the two trees is more correct, and the two trees do not differ in this respect.]

3 Building a lexicon (5 points)

Observe the following data. For each, come up with a lexical entry for the underlined word. You may add a few words how your lexical entry explains the data in question, if there is anything you'd want to say beyond just what it says in the lexical entry. (No need to just restate the lexical entry in prose.)

- (1) a. She set the box on the counter.
- b. * She set the box.
- c. * She set on the counter.
- d. * She set on the counter the box.
- e. She set the box behind the couch.
- f. * She set the box under duress.
- g. She set the box under the table under duress.

set, V, [+ _ DP PP_[+loc]]

The verb *set* needs a locative PP complement.

- (2) a. Phil recorded the movie.
- b. * Phil recorded.
- c. Phil recorded the movie dramatically.
- d. * Phil recorded dramatically.

recorded, V, [+ _ DP]

The DP object is required, the PP is optional.

- (3) a. They seem proud of Pat.
- b. They seem proud.
- c. * They seem proud with Pat.
- d. * They seem proud Pat.

proud, Adj, [+ _ (PP_[+of])]

Basically the same as *rely* (except this is an Adjective) that if there is a PP it is an argument, headed by a particular preposition (*of*). Saying it this way allows for it to be missing. If PP were not in parens, we need to assume that the PP can be there but nevertheless be unpronounced.

- (4) a. The balloon exploded.
- b. The balloon exploded in the hallway.
- c. * The balloon exploded the peacefulness.

explode, V, [+ _]

Intransitive, no DP allowed.

- (5) a. Tracy invited Pat.
b. Tracy invited Pat to the dance.
c. * Tracy invited to the dance.

invite, V, [+ _ DP (PP)]

invited seems notionally ditransitive, so in the first sentence there would seem to be an implicit argument. It's ok to have put just DP, or even DP PP, but the (PP) notation indicates something that, if present, is an argument.