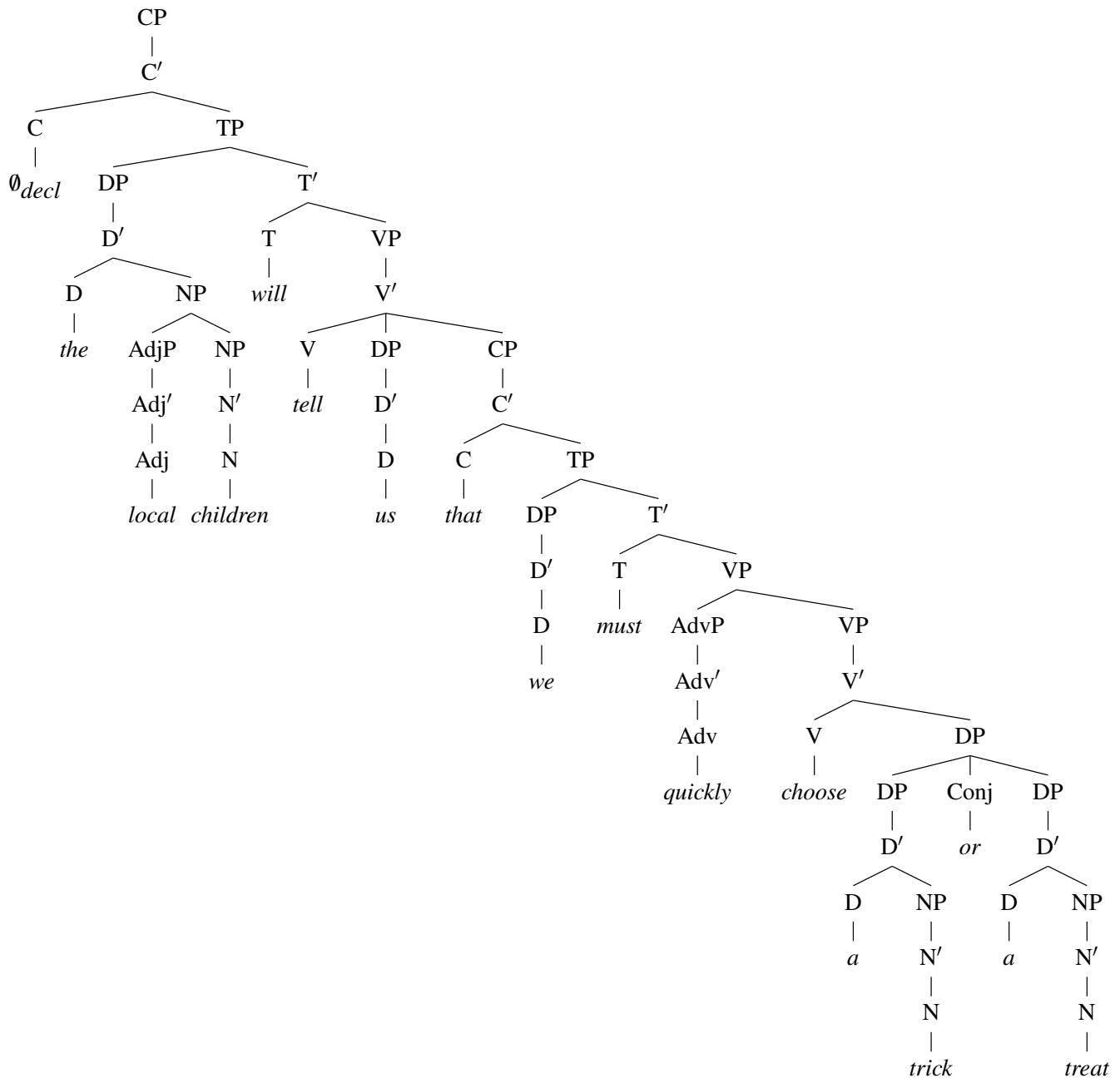


1 From trees to rules and *vice versa* (10 points; 5 points per task)

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, also give the lexical items, but just with their category (no other features).** To give one example of a lexical item: *will*, T.



CP → C'	DP → D'	will, T	a, D
C' → C TP	D' → D (NP)	must, T	the, D
TP → DP T'	NP → AdjP NP	∅ _{decl} , C	us, D
T' → T VP	NP → N'	that, C	we, D
VP → AdvP VP	N' → N	tell, V	children, N
VP → V'	DP → DP Conj DP	choose, V	trick, N
V' → V DP (CP)	AdjP → Adj'	or, Conj	treat, N
AdvP → Adv'	Adj' → Adj		local, Adj
Adv' → Adv			quickly, Adv

1.2 X-bar [2 points]

Circle the two rules in your rules above that don't really conform to the X-bar schema. Ok, I'm not going to actually circle them. But it is these two, the first one has no head, and the second one has two complements.

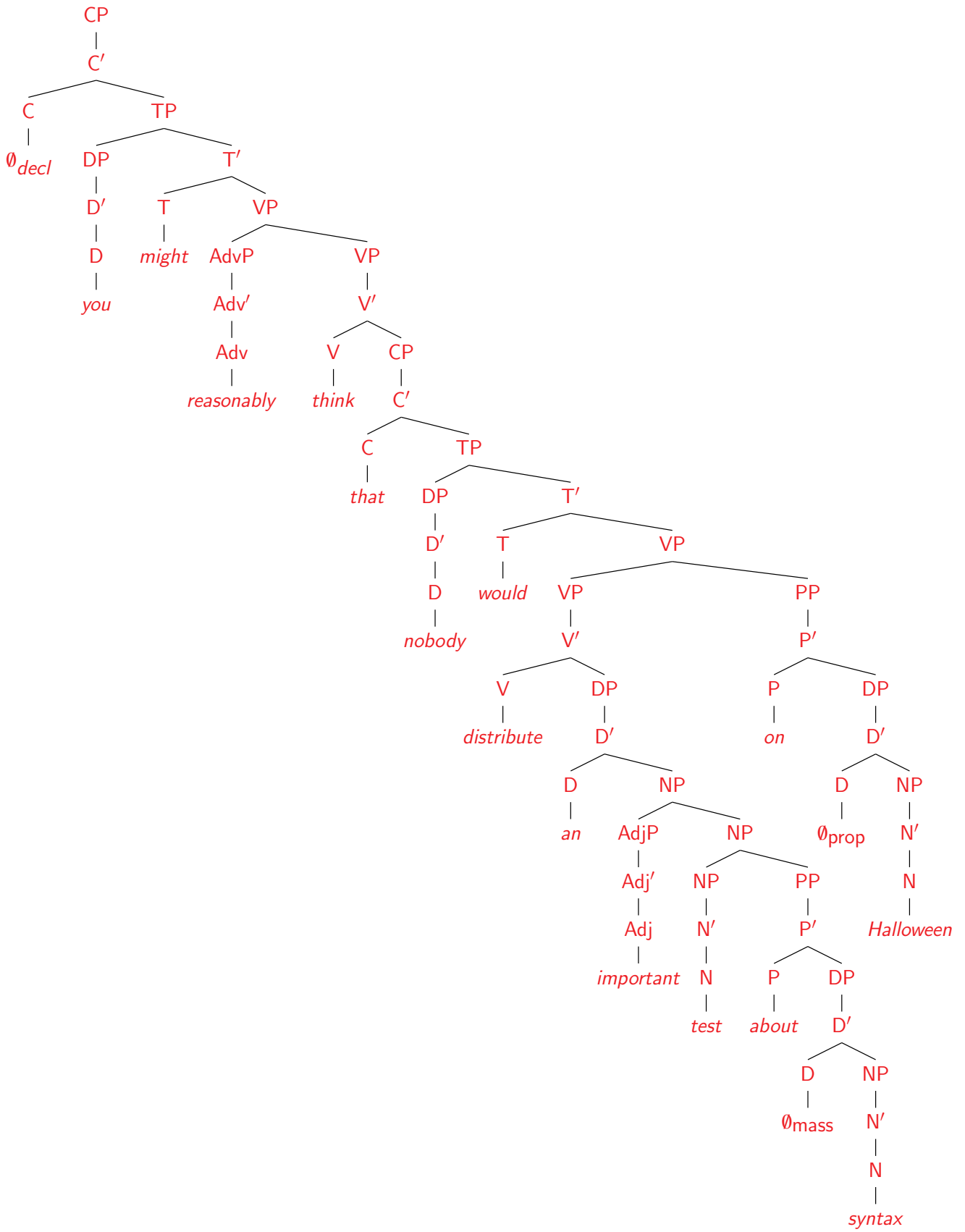
- DP → DP Conj DP
- V' → V DP (CP)

1.3 PS rules to tree

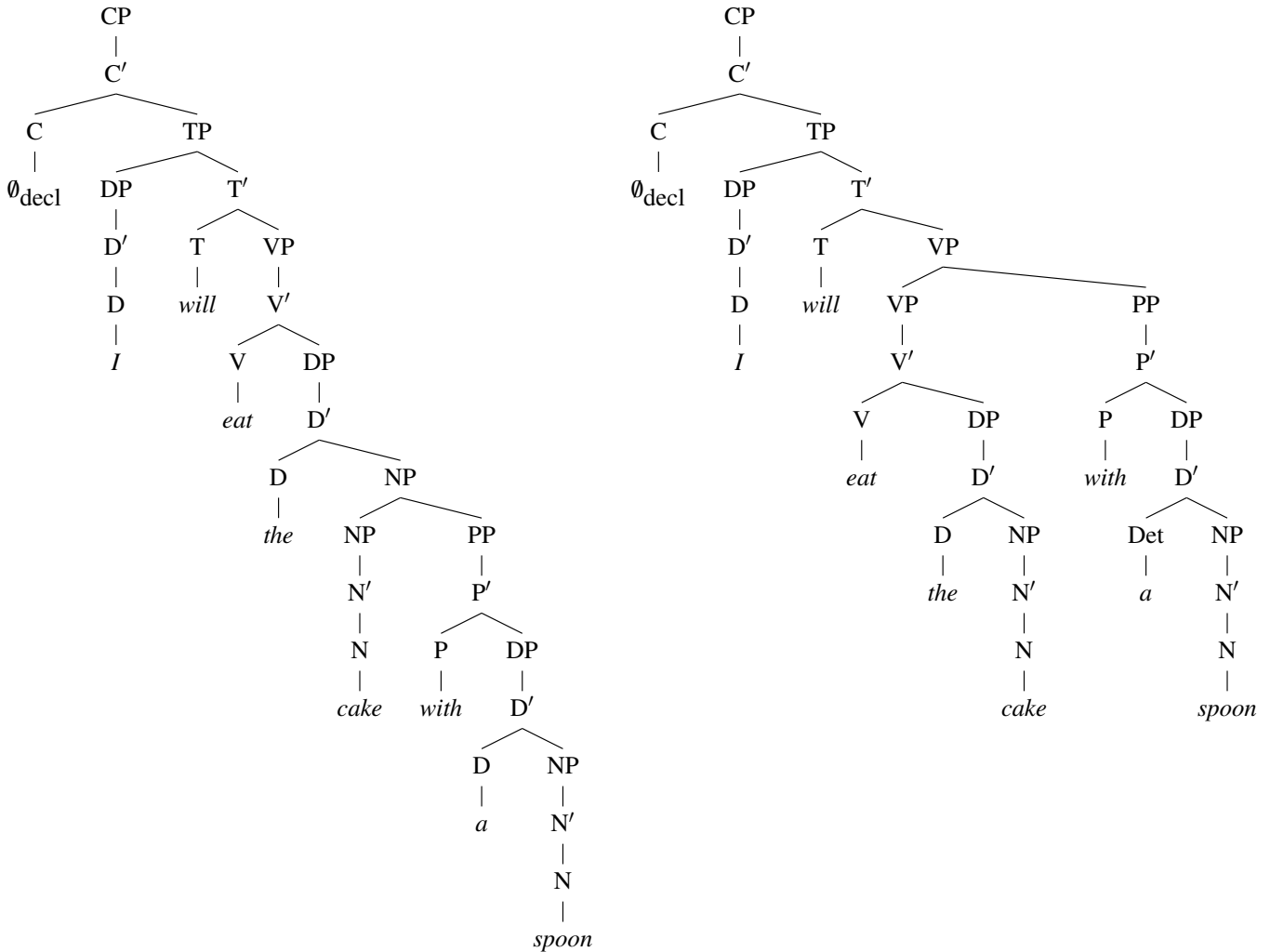
Provide a tree diagram for the following sentence based on the grammar below. (Assume the lexical items that would be appropriate, you can consider *might* to be a T.) You may find that the rule system allows for more than one possible structure. If so, provide the structure that best captures the most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

You might reasonably think that nobody would distribute an important test about syntax on Halloween.

CP → C'	VP → V'	NP → N'
C' → C TP	VP → AdvP VP	NP → AdjP NP
TP → DP T'	VP → VP PP	N' → N' PP
T' → T VP	V' → V DP	N' → N
DP → D'	V' → V CP	PP → P'
D' → D (NP)		P' → P DP



2 Developing an argument (4 points)



Task. The two tree diagrams for *I will eat the cake with a spoon* above represent two different meanings, one is more sensible/likely (eating is done with a spoon) than the other (the cake is with a spoon).

- **Part A:** Provide a sequence of words that form a constituent only in the first tree.
- **Part B:** Provide a sequence of words that form a constituent only in the second tree.
- **Part C:** Write two constituency test sentences for each of those potential constituents you identified in the two parts above (so, four test sentences in total), and indicate what you expect the available meanings will be for each. (You don't need to judge whether they do in fact have the predicted meanings, just say what the predictions are.) You can refer to the meanings as the "spoon-cake" meaning and the "spoon-eat" meaning.

Part A. *the cake with a spoon.* **Part B.** *eat the cake* **Part C.** Here are some tests and predictions.

- It is the cake with a spoon that I will eat. (spoon-cake)
- The cake with a spoon I will eat. (spoon-cake)
- It is eat the cake that I will do. (eat-cake)
- Eat the cake I will with a spoon (eat-cake)

3 Building a lexicon (5 points)

Observe the following data. For each, come up with a lexical entry for the underlined word. (Primarily, this is about constructing (a) subcategorization frame(s) for each.) 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. *Rosemary hates
b. Rosemary hates clementines

hates, V, [+ _ DP]

The ungrammaticality of “Rosemary hates” is explained by the fact that this lexical entry requires a DP complement.

- (2) a. John placed the book on the table.
b. *John placed the book.
c. *John placed on the table.
d. *John placed.
e. *John placed the book the magazine on the table.

placed, V, [+ _ DP PP]

The bad examples are ruled out by the subcategorization frame, which requires that “placed” must have both an DP and a PP complement. (2b) and (2c) are missing one, (2d) is missing both, and (2e) has too many NPs. It might be that the PP needs to be a location as well, though this data set is not telling us that (this would be something you know only via other examples). It's not *wrong* to add that information exactly, but the restriction to location PPs is not necessary for this data set.

- (3) a. *Bill majored Linguistics at BU.

- b. Bill majored in Linguistics at BU.
- c. Bill majored in Linguistics.
- d. * Bill majored at BU.

major, V, [+ _ PP_[+in]]

“Major” requires a PP, and moreover, it has to be one with “in” as its head. This can be ensured by assuming that “in” has a feature [+in], and “major” is looking for that in its subcategorization frame. Thus, the good examples are good because they have an “in” PP, and the bad ones are bad because they do not.

ALSO NOTE: *in* by itself (in *in Linguistics*) is not a PP. It is a P. The DP *Linguistics* is contained within the PP, as a complement to the head P.

- (4) a. Bill seems angry.
- b. * Bill seems.
- c. * Bill seems the teacher.

seems, V, [+ _ AdjP]

This is only good when an adjective follows “seems”, and the subcategorization frame ensures that there is an adjective following “seems.”

- (5) a. He did it for the sake of politeness.
- b. * He did it for the sake.
- c. * He did it for the sake politeness.

sake, N, [+ _ PP]

The badness of (5b) and (5c) is derived from a complement being required, and that it be a PP. In fact, it’s probably always “of” as well, so you could say PP_{+of} instead of PP in the subcategorization frame.

ALSO NOTE AGAIN: *in* by itself (in *in Linguistics*) is not a PP. It is a P. The DP *Linguistics* is contained within the PP, as a complement to the head P.