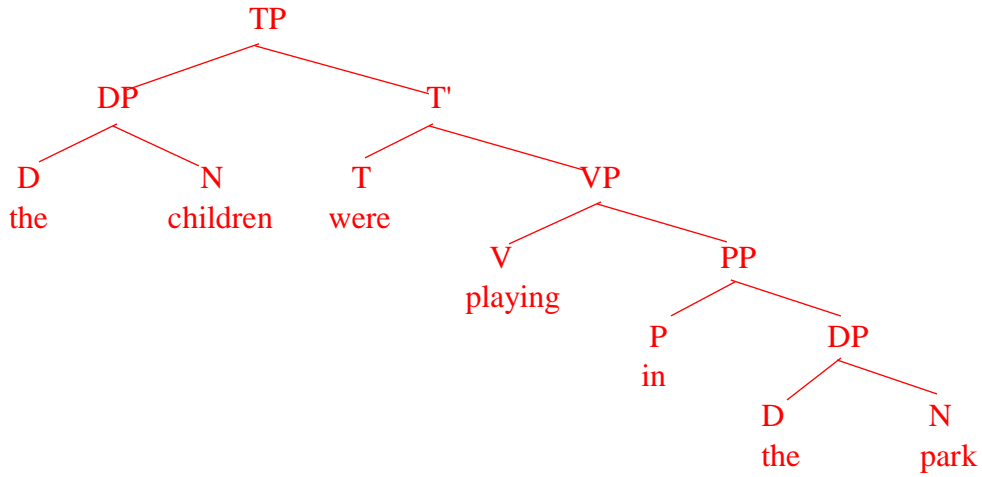


## Answers to Practice Exercises

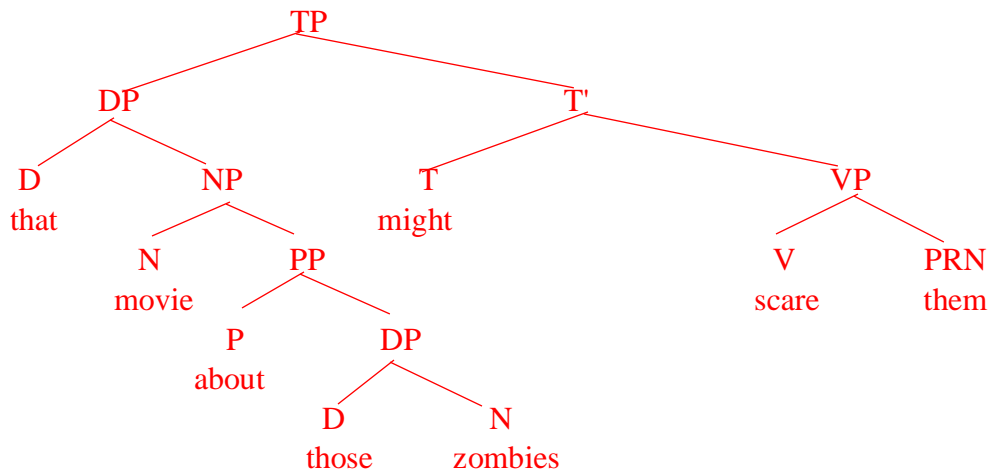
## Chapter 2

Draw trees for each of the sentences below assuming no phonetically null constituents.

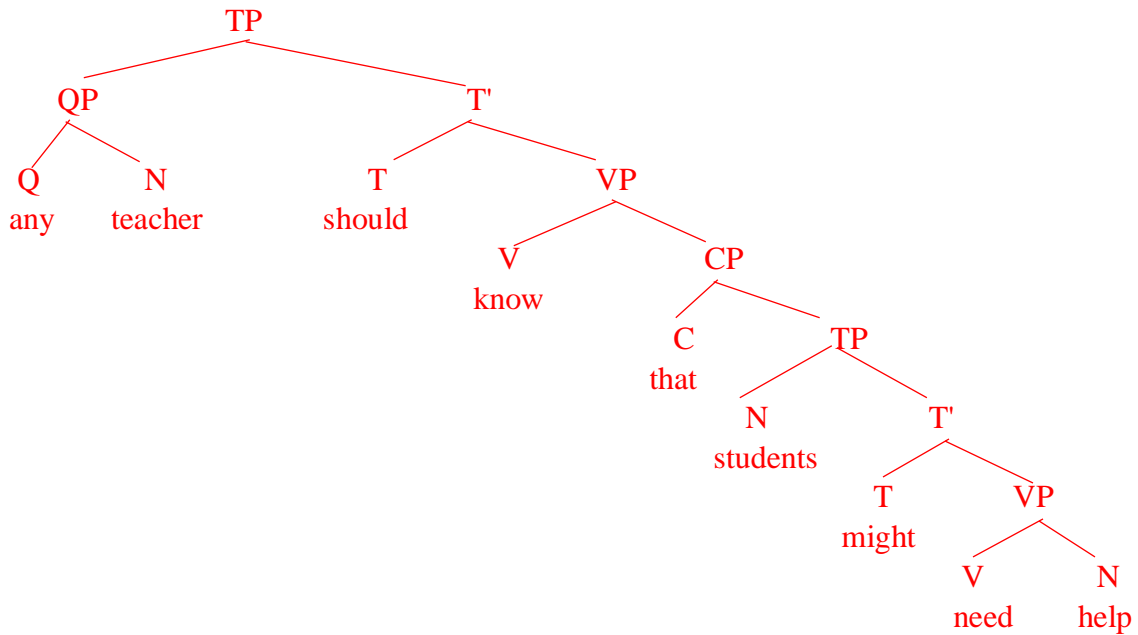
1. The children were playing in the park.



2. That movie about those zombies might scare them.

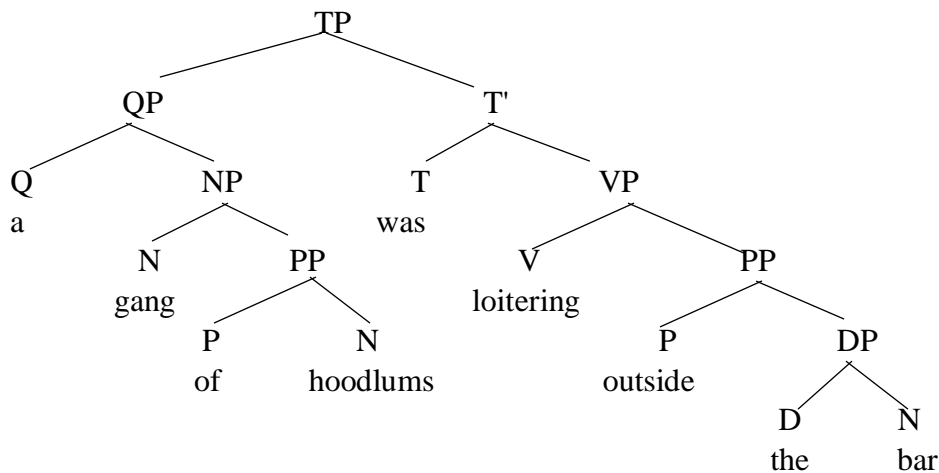


3. Any teacher should know that students might need help.



Given the following trees, give evidence for the constituency of each phrase (every sequence contained in a non-terminal node).

4.



a. The TP *a gang of hoodlums was loitering outside the bar* can be coordinated with another TP: *A gang of hoodlums was loitering outside the bar, but the bar owner refused to call the police.* The Coordination Condition states that "Only constituents of the same type can be coordinated." Since *a gang of hoodlums was loitering outside the bar* can be coordinated with *the bar owner refused to call the police*, *a gang of hoodlums was loitering outside the bar* must be a constituent.

b. *a gang of hoodlums* can be replaced with a pronoun—so *he was loitering outside the bar* is grammatical. Any nonterminal constituent that can be replaced with a single word, in particular with a proform, must be a constituent.

*a gang of hoodlums* can be coordinated with *Mary* giving *A gang of hoodlums and Mary were loitering outside the bar*. The Coordination Condition states that "Only constituents of the same type can be coordinated." Since *a gang of hoodlums* can be coordinated with *Mary*, *a gang of hoodlums* must be a constituent.

*a gang of hoodlums* can stand alone in answer to the question *Who was loitering outside the bar?* Only constituents can stand alone in answer to questions, since *a gang of hoodlums* can stand alone in answer to a question, it must be a constituent.

c. *gang of hoodlums* can be coordinated with *group of nervous bystanders*, giving *A gang of hoodlums and group of nervous bystanders was loitering outside the bar*. The Coordination Condition states that "Only constituents of the same type can be coordinated." Since *gang of hoodlums* can be coordinated with *group of nervous bystanders*, *gang of hoodlums* must be a constituent.

d. *of hoodlums* can be coordinated with *of criminal wannabes*, giving *A gang of hoodlums and of criminal wannabes was loitering outside the bar*. The Coordination Condition states that "Only constituents of the same type can be coordinated." Since *of hoodlums* can be coordinated with *of criminal wannabes*, *of hoodlums* must be a constituent.

e. *was loitering outside the bar* can be coordinated with *was threatening would-be customers*, giving *A gang of hoodlums was loitering outside the bar and was threatening would-be customers*. The Coordination Condition states that "Only constituents of the same type can be coordinated." Since *was loitering outside the bar* can be coordinated with *was threatening would-be customers*, *was loitering outside the bar* must be a constituent.

f. *loitering outside the bar* can be coordinated with *threatening would-be customers*, giving *A gang of hoodlums was loitering outside the bar and threatening would-be customers*. The Coordination Condition states that "Only constituents of the same type can be coordinated." Since *loitering outside the bar* can be coordinated with *threatening would-be customers*, *was loitering outside the bar* must be a constituent.

*Loitering outside the bar* can stand alone in answer to the question *What was a gang of hoodlums doing?* Only constituents can stand alone in answer to questions, since *a loitering outside the bar* can stand alone in answer to a question, it must be a constituent.

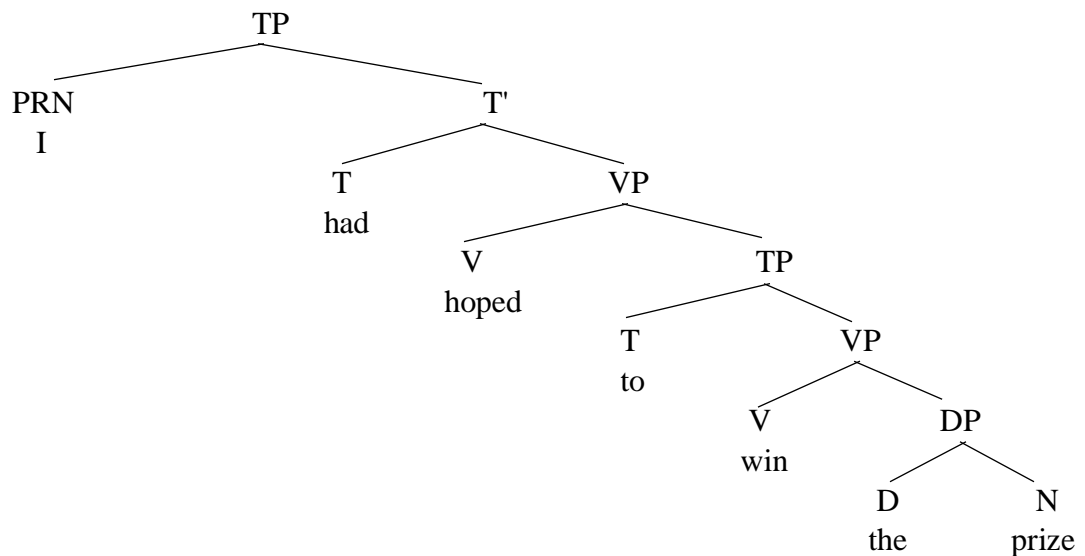
g. *outside the bar* can be coordinated with *down the street*, giving *A gang of hoodlums was loitering outside the bar and down the street*. The Coordination Condition states that "Only constituents of the same type can be coordinated." Since *outside the bar* can be coordinated with *down the street*, *outside the bar* must be a constituent.

*outside the bar* can stand alone in answer to the question *Where was a gang of hoodlums loitering?* Only constituents can stand alone in answer to questions, since *outside the bar* can stand alone in answer to a question, it must be a constituent.

h. *the bar* can be coordinated with *the restaurant* giving *A gang of hoodlums was loitering outside the bar and the restaurant.* The Coordination Condition states that "Only constituents of the same type can be coordinated." Since *the bar* can be coordinated with *the restaurant*, *the bar* must be a constituent.

*the bar* can stand alone in answer to the question *What was a gang of hoodlums loitering outside?* Only constituents can stand alone in answer to questions, since *the bar* can stand alone in answer to a question, it must be a constituent.

5.



- a. The TP *I had hoped to win the prize* can be coordinated with another TP: *I had hoped to win the prize, but Barry came in first.* The Coordination Condition states that "Only constituents of the same type can be coordinated." Since *I had hoped to win the prize* can be coordinated with *Barry came in first*, *I had hoped to win the prize* must be a constituent.
- b. *Had hoped to win the prize* can be coordinated with *was disappointed with the results*, giving *I had hoped to win the prize and was disappointed with the results.* The Coordination Condition states that "Only constituents of the same type can be coordinated." Since *had hoped to win the prize* can be coordinated with *was disappointed with the results*, *had hoped to win the prize* must be a constituent.

- c. *hoped to win the prize* can be coordinated with *been disappointed with previous results*, giving *I had hoped to win the prize and been disappointed with previous results*. The Coordination Condition states that "Only constituents of the same type can be coordinated." Since *hoped to win the prize* can be coordinated with *been disappointed with previous results*, *hoped to win the prize* must be a constituent.
- d. *to win the prize* can be coordinated with *to beat all the other competitors*, giving *I had hoped to win the prize and to beat all the other competitors*. The Coordination Condition states that "Only constituents of the same type can be coordinated." Since *to win the prize* can be coordinated with *to beat all the other competitors*, *to win the prize* must be a constituent.

*to win the prize* can stand alone in answer to the question *What had I hoped?* Only constituents can stand alone in answer to questions, since *to win the prize* can stand alone in answer to a question, it must be a constituent.

- e. *win the prize* can be coordinated with *beat all the other competitors*, giving *I had hoped to win the prize and beat all the other competitors*. The Coordination Condition states that "Only constituents of the same type can be coordinated." Since *win the prize* can be coordinated with *beat all the other competitors*, *win the prize* must be a constituent.

*win the prize* can stand alone in answer to the question *What had I hoped to do?* Only constituents can stand alone in answer to questions, since *win the prize* can stand alone in answer to a question, it must be a constituent.

- f. *the prize* can be coordinated with *the admiration of the onlookers*, giving *I had hoped to win the prize and the admiration of the onlookers*. The Coordination Condition states that "Only constituents of the same type can be coordinated." Since *the prize* can be coordinated with *to the admiration of the onlookers*, *the prize* must be a constituent.

*the prize* can be replaced with a pronoun—so *I had hoped to win it* is grammatical. Any nonterminal constituent that can be replaced with a single word, in particular with a proform, must be a constituent.

*the prize* can stand alone in answer to the question *What had I hoped to win?* Only constituents can stand alone in answer to questions, since *the prize* can stand alone in answer to a question, it must be a constituent.

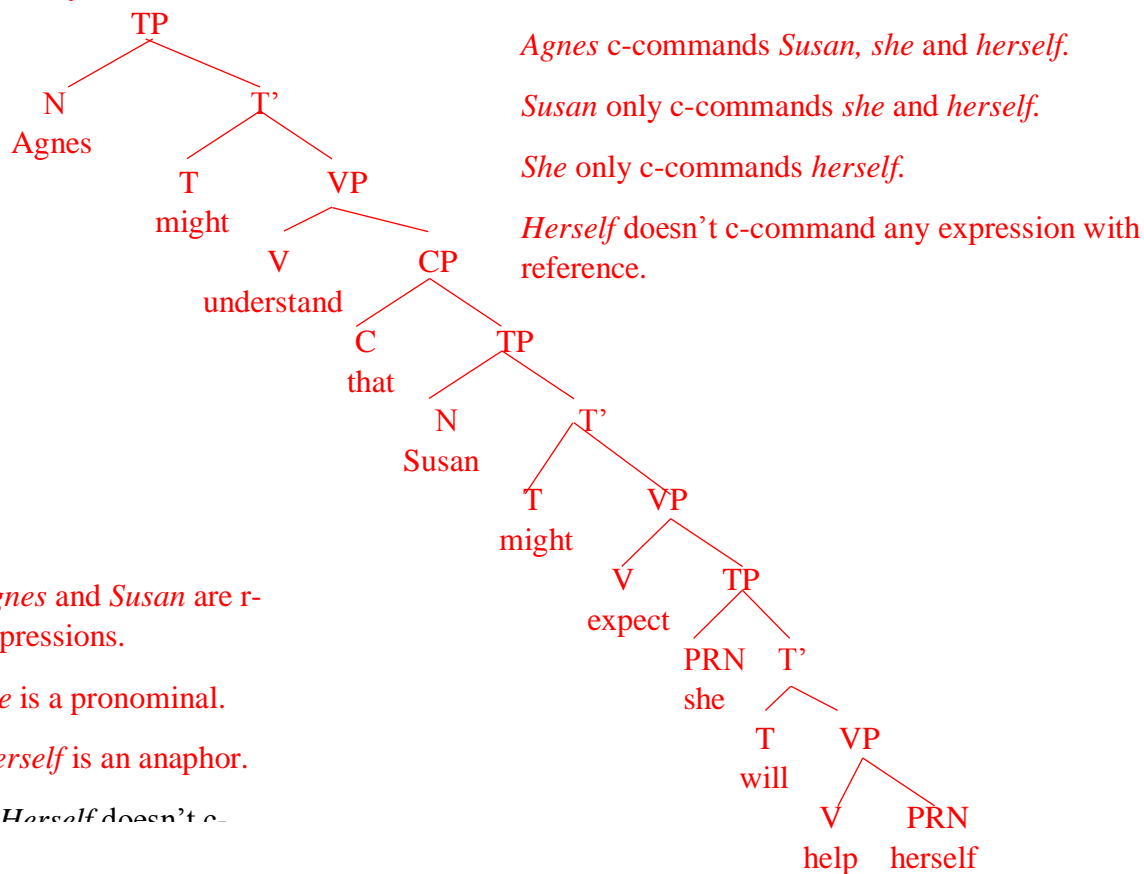
Given the sentence below, identify the coreference possibilities of *Agnes*, *Susan*, *she* and *herself*, and then compare those possibilities with the predictions of the Binding Theory. (In order to answer this question, you will need to draw a tree for the sentence to demonstrate the c-command relationships.)

6. Agnes might understand that Susan might expect she will help herself.

*Agnes* and *Susan* cannot be coreferential.

*She* must be coreferential with *herself*.

*She* and *herself* can be coreferential with *Agnes*, *Susan* or some other third person feminine entity.



*Agnes* and *Susan* are r-expressions.

*she* is a pronominal.

*Herself* is an anaphor.

*Herself* doesn't c-

According to Principle A of the Binding Theory an anaphor must be bound in the smallest TP that contains it. The only expression with reference in the smallest TP that contains *herself* is *she* and *she* c-commands *herself*. Therefore *she* must bind *herself* if this sentence is grammatical and so *she* and *herself* must be coreferential.

According to Principle B of the Binding Theory a pronominal must be free in the smallest TP that contains it. *She* is not c-commanded by any expression with reference in the smallest TP that contains it. Therefore *she* can be coreferential with any expression with reference that is not in the TP with it, regardless of whether those expressions c-command *she* or not. Therefore *she* can be coreferential with *Agnes* or *Susan* or any other appropriate expression.

According to Principle C of the Binding Theory, an R-expression must be free in the entire structure. So *Agnes* and *Susan* cannot be coreferential since *Agnes* c-commands *Susan*.

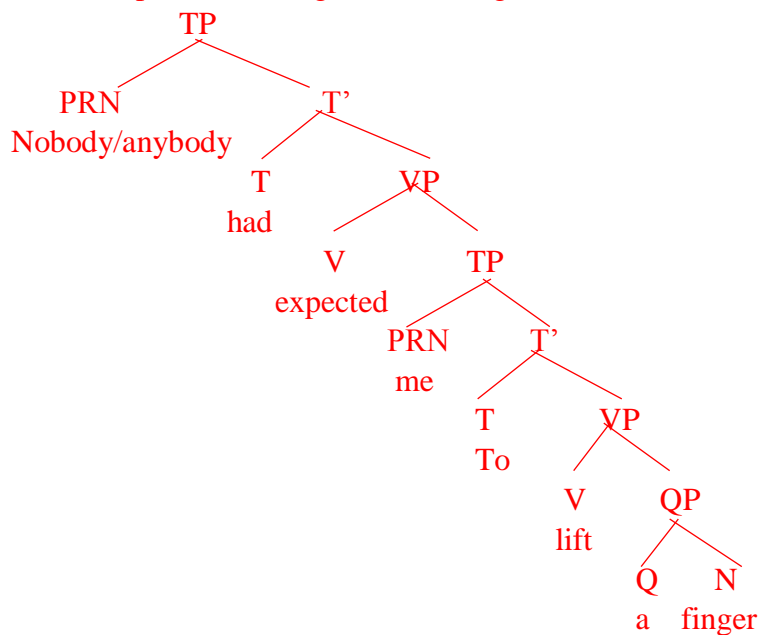
The Binding Theory therefore predicts the correct coreference properties.

Explain why (7a) below is grammatical while (7b) is ungrammatical.

7a. Nobody had expected me to lift a finger.

b. \*Anybody had expected me to lift a finger.

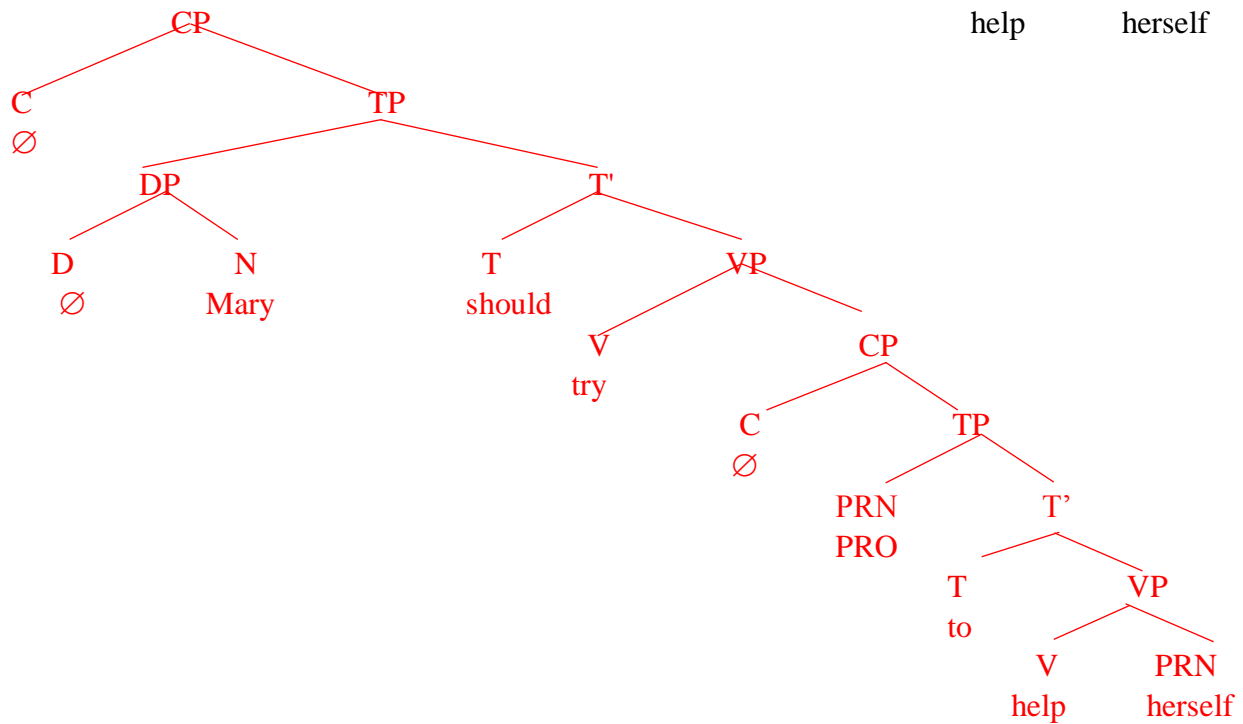
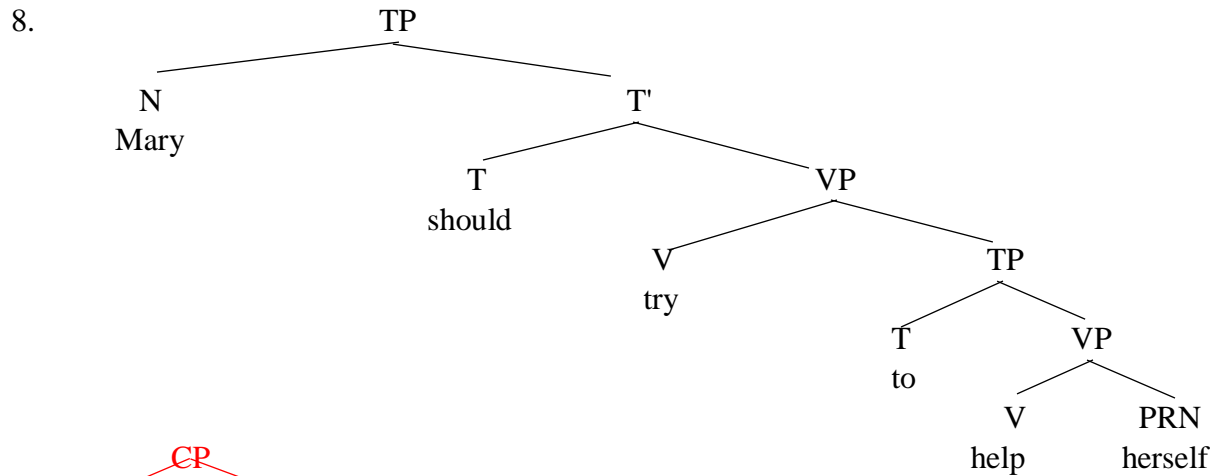
*Lift a finger* is a polarity item as is *anybody*. All polarity items must be c-commanded by an affective expression (a negative, interrogative or conditional element).



In (7a) the negative pronoun *nobody* c-commands in the only polarity item, *lift a finger* and so the polarity item is legal. In (7b) the two polarity expressions, *anybody* and *lift a finger* are not c-commanded by any affective expressions, therefore (7b) must be ungrammatical and it is.

Chapter 3

The tree in (8) would be generated by merger as described in Chapter 1. Chapter 2 suggests that there are a number of phonetically null elements. Identify each of the phonetically null elements missing from this tree and draw a new tree that includes them.



The topmost phonetically null C makes the entire CP a declarative statement. That C assigns nominative case to *Mary*.

The phonetically null D marks the DP as definite.

The lower phonetically null C marks the embedded CP as declarative and assigns null case to PRO.

The PRO is coreferential with the DP *Mary* (and must be to give the right interpretation for the clause and for the anaphor *herself*).



If (9) is a TP, what problem(s) does (9) raise for the theory?

9. The children played in the backyard

The Headedness Principle states that all nonterminal nodes must be a projection of a lexical item. Since this is a TP, there must be a T head and there is no overt T.

If (9) is not a CP, what problem(s) does (10) raise for the theory?

10. The children played in the backyard, but did they stay there?

*Did they stay there* is a CP (with an overtly filled C). The Coordination Condition states that "Only constituents of the same type can be coordinated." If *the children played in the backyard* is not a CP, this grammatical sentence would violate the Coordination Condition.

Explain the difference in structure that accounts for the differences in grammaticality in the sentences in (11).

11a. Oscar planned to win.

- b. Oscar planned for him to win.
- c. \*Oscar planned him to win
- d. It was planned for him to win.
- e. \*He was planned to live
- f. Betty believed him to be a genius.
- g. \*Betty believed to be a genius
- h. He was believed to be a genius.
- i. \*It was believed for him to be a genius.
- j. Evelyn expected to win.
- k. Evelyn expected him to win.
- l. It was expected for him to win.
- m. He was expected to win.

The verbs in these sentences select different kinds of complements.

*Plan* selects control clauses and *for* clauses, but not *for* clauses or ECM (defective TP) complements.

*Believe* selects ECM (defective TP) complements.

*Expect* selects control clauses, *for* clauses and ECM (defective TP) complements.