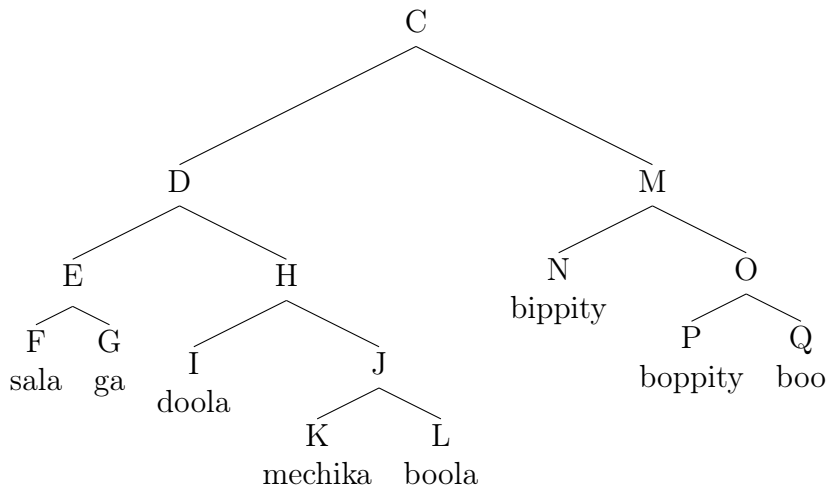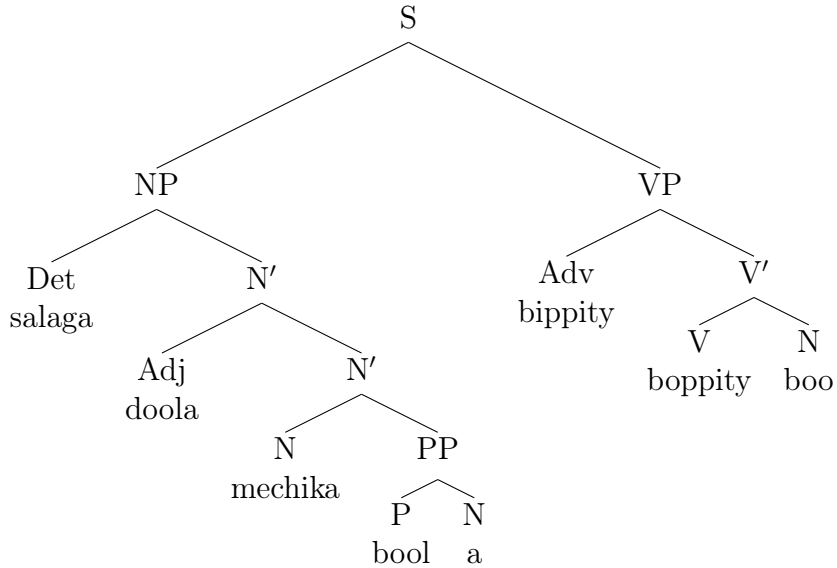# Homework 4

Your name: _____

Due Tuesday November 15

Feel free to print this and write your answers directly on the assignment itself, or you can write the answers on a separate sheet of paper. Remember to write <u>clearly</u>!

Question 1: Reading trees, A. Use this tree structure to answer the questions that follow.

a. What is/are D's sister(s)?

b. What is/are M's daughter(s)?

c. What is/are J's mother(s)?

d. Is *bippity boppity* a constituent? How can you tell?

e. Is *bippity boppity boo* a constituent? How can you tell?

f. Is *sala ga doola* a constituent? How can you tell?

g. Is *boola bippity* a constituent? How can you tell?

h. Is *boo* a constituent? How can you tell?

i. What words are in the constituent H?

Question 2: Reading trees, B. Use this tree structure to answer the questions that follow.

```
                              S
                  ┌───────────┴───────────┐
                 NP                        VP
          ┌──────┴──────┐           ┌──────┴──────┐
         Det            N'         Adv            V'
        salaga    ┌──────┴────┐   bippity    ┌────┴────┐
                 Adj          N'             V         N
                doola    ┌─────┴─────┐    boppity     boo
                         N          PP
                      mechika     ┌──┴──┐
                                  P     N
                                 bool   a
```

a. What is the head of the phrase consisting of *bippity boppity boo*?

b. What is the head of the phrase consisting of *salaga doola mechika bool a*?

c. Is *bool a* a constituent? How can you tell?

d. Is *doola* a constituent? How can you tell?

e. What is *bool*'s complement?

f. What category does *boppity* select?

g. What is the head of the phrase consisting of *a*?

h. What is the head of the phrase consisting of *bool a*?

i. Is *doola mechika bool a* a constituent? How can you tell?

j. What is *mechika*'s complement?

Question 3: Constituency tests.
(i) Apply the indicated constituency test to the indicated string of words, (ii) mark the resulting sentence with a * if it is ungrammatical or a ✓ if it is grammatical, and (iii) say whether you think the string is a constituent or not, and why (which may not follow directly from whether the test comes out grammatical or not). *Note: If you're unsure of a judgment, I am happy to give my own judgments of (un)grammaticality for any sentences you construct—just email me the sentences you want judged.*

Example: Perform a **topicalization test** on the string "on Friday" in the sentence "Becca flew to DC on Friday."
    ✓On Friday, Becca flew to DC.
    I conclude that "on Friday" is a constituent, because meaning is preserved.

a. Perform a **replacement test** on the string "to DC on Friday" in the sentence "Becca flew to DC on Friday."

b. Perform a **topicalization test** on the string "Friday" in the sentence "Becca flew to DC on Friday."

c. Perform a **stand alone test** on the string "on the table" in the sentence "Dan put a book on the table."'

d. Perform a **replacement test** on the string "fascinating book" in the sentence "Dan recommended this fascinating book that discusses the French Revolution."

e. Perform a **replacement test** on "book that discusses the French Revolution" in the sentence "Dan recommended this fascinating book that discusses the French Revolution."

f. Follow up to (d) and (e): Are the results of these tests in conflict with each other? If not, why not? If so, how can we explain/resolve this conflict?

Question 4: Ambiguous constituency.
The sentence in (1) is ambiguous both meaning-wise and structure-wise (with the different meanings corresponding to the different structures). In the places indicated below, (i) paraphrase each meaning and then (ii) perform two constituency tests that work for that meaning (and not for the other meaning). In other words, your constituency tests should disambiguate the sentence, leaving it with only one reading after you have applied the test.

(1)   Laura killed the spider with one foot.

Meaning/structure 1 paraphrase:

- One constituency test that ONLY WORKS for meaning/structure 1:

- A different constituency test that ONLY WORKS for meaning/structure 1:

Meaning/structure 2 paraphrase:

- One constituency test that ONLY WORKS for meaning/structure 2:

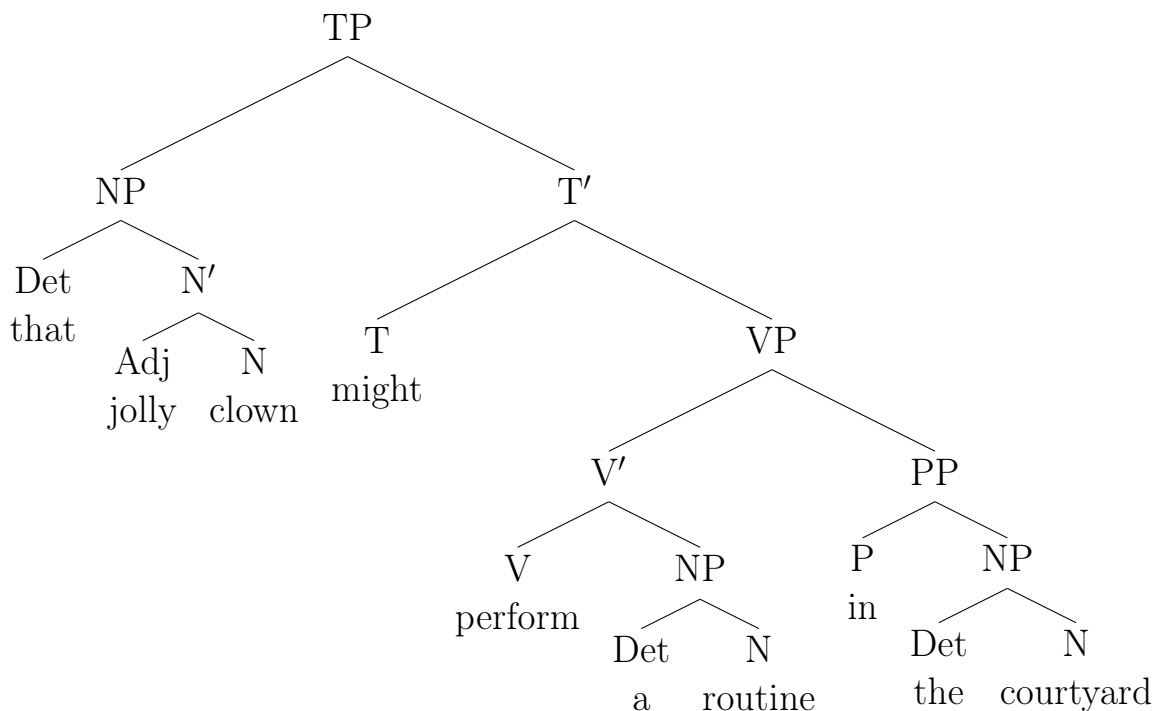- A different constituency test that ONLY WORKS for meaning/structure 2:

Question 5: TP.
Draw a syntax tree that uses TP (instead of S) for the sentence in (2a), keeping in mind the grammaticality judgments in (2b-d).

(2)   a.   The bear will cross the stream in the morning.
       b.   The bear will do so in the morning.
       c.   *The bear will do so the stream in the morning.
       d.   The bear will do so.

4

Question 6: Replacement tests

The following tree is for the sentence *That jolly clown might perform a routine in the court-yard.* Next to EVERY NODE, write what you should be able to replace it with, according to our replacement tests. E.g., next to a PP that is talking about a time, I would write "then". If there is no appropriate constituency test for a node, write "n/a" next to the node.

```
                              TP
               ┌───────────────┴───────────────┐
              NP                               T'
         ┌─────┴─────┐              ┌───────────┴───────────┐
        Det          N'            T                       VP
        that      ┌──┴──┐        might         ┌────────────┴────────┐
                 Adj    N                      V'                    PP
                jolly  clown            ┌──────┴──────┐         ┌─────┴─────┐
                                        V            NP         P          NP
                                     perform      ┌──┴──┐       in      ┌───┴───┐
                                                 Det    N              Det      N
                                                  a   routine         the   courtyard
```

Question 5: Complements vs. adjuncts

Although the judgments are less strong, we have evidence for both complements and adjuncts existing in NP (just like in VP, as seen on Handout 6). Consider the following sentence, which has the subject NP bracketed:

(3)   [That student of linguistics with short hair] aced the test.

- Now consider the following grammaticality judgments, based on the sentence in (3).

(4)   a. *That one of linguistics with short hair aced the test.
        b.   That one with short hair aced the test.
        c.   That one aced the test.
        d. *That student with short hair of linguistics aced the test.
        e.   That student with short hair aced the test.
        f.   That student of linguistics aced the test.
        g.   That student aced the test.

- Complements in VP are not strandable. Are complements in NP strandable? Which example(s) in (4) show(s) you this?

- Adjuncts in VP are strandable. Are adjuncts in NP strandable? Which example(s) in (4) show(s) you this?

- Complements in VP need to be adjacent to V. Do complements in NP need to be adjacent to N? Which example(s) in (4) show(s) you this?

- Complements in VP are not optional. Are complements in NP optional? Which example(s) in (4) show(s) you this?

- Draw a tree (TP) for the sentence in (3). Make a square around the complement of N (if any), and make a circle around the adjunct of N (if any). *(Note: don't worry about the exact position/status of "short".)*