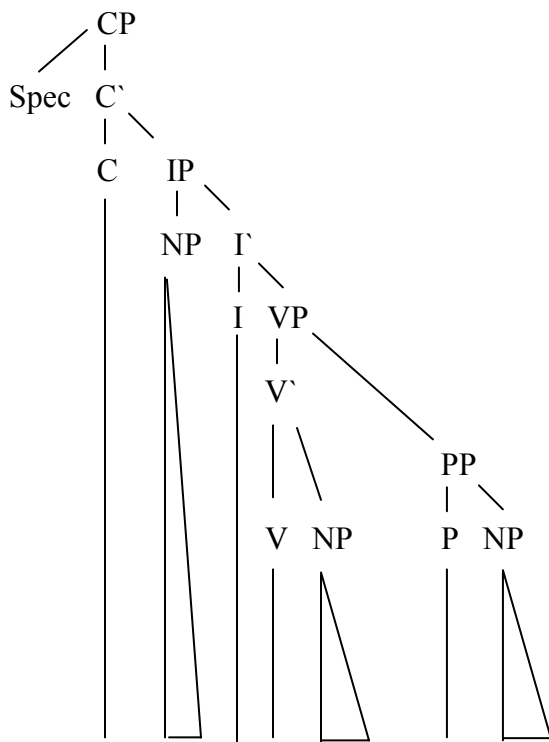9.56, Fall 2004, PROBLEM SET, DUE Tuesday, Sept. 28, 2004 (at beginning of class)

Please note: These are not meant to be "tricky" but to help you learn, to let you test your understanding. Answers should be given in a fairly brief manner; no extra points for extra words. Clarity and correctness is most important. We are happy with and encourage working in groups, but all exercises must be written in your own words (no copying or group submissions). As always, note anyone with whom you work.

Exercise 1

On the basis of the following tree diagram, decide which of the following statements are true and which are false:

Will   John – buy   a car   after the holidays ?

(a) IP dominates CP
(b) IP immediately dominates the subject NP
(c) IP is a sister of C
(d) V and the NP *a car* are sisters
(e) The NP *the holidays* is a constituent of IP
(f) The NP *the holidays* is an immediate constituent of VP
(g) VP and I are sisters
(h) VP precedes I

Exercise 2

Consider:
   (a) Mary has been ill
   (b) Mary has not been ill
   (c) *Mary has been not ill
   (d) Mary is not ill
   (e) *Mary not is ill

Suppose that *not* starts out in the structure to the *left* (outside of) the VP. That is, *not* is a functional item, an instance of a functional category; it starts out outside VP. We know that *Mary* raises to Spec, IP. How do we account for the pattern in (a) through (e) above? In particular, *have* and *be* are Auxiliary verbs (Aux). What does Aux do? Where does it move to? All Aux? (Remember that a head (like Aux) must move to a head position. Which head is available?

<u>Exercise 3</u>

Show the X-bar structure (phrase-structure) of the following (include INFL (I) and COMPLEMENTIZER (C):

(a) Steven will meet the new maid in the foyer of the opera.

(b) Chris prefers for Veronica to win the race
    (HINT: *to* is often thought to be the word that is the head of a non-finite clause)

(c) She has decided that owners of big cars without children should pay tax.

(d) Veronica's friend hopes that Chris is winning

Show the derivation in GERMAN of the sentence: "That cake baked John." (Meaning the sensible meaning, of course, i.e., John baked that book.). In particular, draw a tree and show the movements.

Exercise 5

Norwegian in an SVO/V2 language. For each of the following sentences say whether the sentence is good in the adult language. In each case, why? (Remember that in a V2 language an adverb like "soon" can be the constituent which moves into first position (Spec,C)). +*fin* means "finite"

 (1) John leaves (+fin) soon

 (2) Soon leaves (+fin) John

 (3) John leave [-fin] soon

 (4) Soon leave [-fin] John

 (5) Soon John leaves [+fin]

 (6) Soon John leave [-fin]

Exercise 6

Illustrate Principles A, B, and C of the binding theory with examples of your own, providing three examples for each principle.

Principle A

Principle B

Principle C

Exercise 7

Consider the following sentences in light of the binding theory as discussed in class. How do you explain their ungrammaticality?

    (a) *Brian_i liked [Mary's picture of himself_i]

    (b) *Brian_i's mother liked himself_i

    (c) *I expect [himself_i to invite Poirot_i]

Exercise 8

Consider the following examples. Does the binding theory explain the judgments we indicate? Why?

(a) *John requests that himself leave soon.

(b) *John longs for Mary to date himself.

(c) A picture of himself astonished John

(d) Unflattering descriptions of himself have been banned by our president.

(e) *Himself astonished John.

(f) Joan$_i$ recognized the necessity for her$_i$ to leave.

<u>Exercise 9</u>

Discuss the derivation of the following sentences. For each sentence, provide a D-structure representation, an S-structure representation, and discuss the assignment of theta roles and of case.

    (a) The prisoners have been arrested.

    (b) Poirot seems to like the countryside.

    (c) George is thought to have been invited to the court.

    (d) John is likely to leave soon.

Exercise 10

Consider the following sentences. For each sentence we offer some possible syntactic representations. Which one is theoretically justified? Provide evidence.

(a) John tried to go.
   a. [IP John_i tried [CP [IP PRO_i to go]]]
   b. [IP John_i tried [IP t_i to go]]

(b) John appears to be happy.
   a. [IP John_i appears [IP t_i to be happy]]
   b. [IP John_i appears [CP [IP PRO_i to be happy]]]

(c) John is happy to leave.
   a. [IP John_i is happy [IP t_i to leave]]
   b. [IP John_i is happy [IP PRO_i to leave]]
   c. [IP John_i is happy [CP [IP PRO_i to leave]]]

Exercise 11

Consider the following (ungrammatical) examples. Together, they demonstrate a certain restriction on A-movement. What is this restriction?

(a) *A kiss$_i$ was given Mary t$_i$ by John.
(b) *John$_i$ seems that Mary likes t$_i$.
(c) *John$_i$ seems that he$_i$ is believed t$_i$ to be happy.
(d) *John$_i$ seems that [$_{IP}$ it appears [$_{IP}$ t$_i$ to be happy]].

<u>Exercise 12</u>

Show the phrase (X-bar) structure and the movements that take place in the following:

    (a) Which cookie is Mary eating?

    (b) This is the author whom I like.

    (c) Which detectives will be invited?

(d) Who do you think seems to be nicest?

(e) Which ships do you think will sink?