

## Assignment 6: Binding Theory

1. You are not required to submit this assignment but you should try it out and we will discuss it in class. Understanding this assignment will be helpful for the midterm exam, which is coming up.

Consider the following set of data:

- (1) a. [When John<sub>i</sub> entered the room], [he<sub>i/j</sub> smiled].
- b. [When he<sub>i/j</sub> entered the room], [John<sub>i</sub> smiled].
- c. He<sub>j/\*i</sub> smiled [when John<sub>i</sub> entered the room].
- d. John<sub>i</sub> smiled [when he<sub>i/j</sub> entered the room].

a. Setting aside the evidence from binding theory, what trees are possible for the examples in (1)? You should make the following assumptions:

- (2) a. Treat *when* as a C, and the entire *when*-clause as an S-bar.
- b. To handle attachment of the *when*-clause S-bar, we can assume the following phrase structure rules in addition to the ones we already have:
  - i.  $S \rightarrow \bar{S} NP VP$
  - ii.  $S \rightarrow \bar{S} S$
  - iii.  $S \rightarrow NP VP \bar{S}$
  - iv.  $S \rightarrow S \bar{S}$
  - v.  $VP \rightarrow V NP \bar{S}$
  - vi.  $VP \rightarrow VP \bar{S}$

b. Which of the trees generated by the rules in (2) are ruled out by the evidence from binding theory? Consequently, which of the rules given above must be rejected?