Ling 4/503 **Homework 4** Oct. 10, 2002
Due: Oct. 17, 2002

1. Passive and Binding Theory: Consider the sentences below:
    a) The barber$_i$ was only shaved by himself$_i$.
    b) *The barber$_i$ was only shaved by him$_i$
    c) The corrupt policemen$_i$ were fingered by each other$_i$
    d) *The corrupt policemen$_i$ were fingered by them$_i$

→ draw trees for sentences a) and c), showing any movement with traces and arrows
→ explain why sentences b) and d) are ungrammatical, using principles of binding theory
→ What can you conclude about the relative derivational relationship between passive and binding? (I.e., which comes first, the passive or the binding?) Why?

2. Consider the following sentences:
    a)   John is certain to win
    b)   It is certain that John will win
    c)   John$_i$ is certain that he$_i$ will win

→ Which of b) or c) is (roughly) synonymous with a)?
→ What do you have to assume about the meaning of *is certain*? Give two theta-grids for *is certain* which account for the difference between b) and c). (Remember: *it* can be an *expletive* in English — a meaningless DP functioning as a subject).
→ Draw trees for all three sentences, showing any movement with traces and arrows

3. Consider the following pairs of sentences
    a) Nobody could explain last night
    b) Last night couldn't be explained

    c) They decided on the boat
    d) The boat was decided on

→ Why are the a) and c) sentences ambiguous, while the b) and d) sentences are not? Explain, and illustrate your explanation by drawing two trees for the a) and c) sentences, one representing each interpretation.

→ Make the following assumptions:

•   The theta-grid for *explain* is

    explain: $\left[\underline{\text{Agent}}, \left(\left\{\begin{matrix}\text{Theme}\\\text{Proposition}\end{matrix}\right\}\right)\right]$

(remember: curly brackets mean "one of", round brackets mean "optional")

- There is a compound verb, *decide on*, whose structure is [$_V$ V P], and whose theta-grid is

    decide on   [<u>Agent</u>, Theme]

- There is a simple verb, *decide*, whose theta-grid is

$$\textit{decide} : \left[\underline{\text{Agent}} , \left(\left\{ \begin{array}{l} \text{Theme} \\ \text{Proposition} \end{array} \right\} \right) \right]$$

- The DP *last night* has the unusual ability to function as an adverbial all by itself.