ENG 235: Morphology and Syntax of English — Fall 2005: TUE & FRI 12.00-13.30
Linguistics Section, Department of English Studies — University of Cyprus
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— handout / slide adopted from Prof. Howard Lasnik (U of Maryland) —

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CLASS 11: INTRO TO SYNTAX

1. THEORY OF LANGUAGE (I)

Any adequate theory of language must provide answers to the following questions:

- What is a language?
- What is it that you know when you know a language?
- What are the essential properties of human languages that make them different from animal communication systems or artificial languages?
- How do human languages differ and what do they have in common?

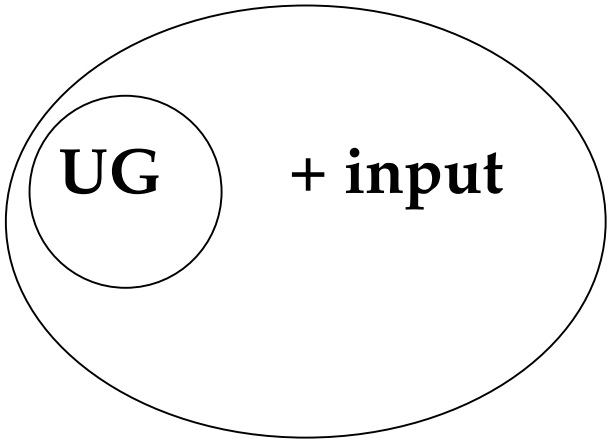
Our Theory of Language:

- **STEP I:** ***Particular Grammars***
  Formulate detailed descriptions of particular languages, i.e. a set of rules/principles that specify how to form (morphology and syntax), pronounce (phonetics and phonology) and interpret (semantics and pragmatics) words, phrases and sentences in each particular language.

- **STEP II:** ***Universal Grammar***
  Once we have compiled detailed grammars of particular languages, we abstract from them common properties that they all share (*linguistic universals*). Chomsky argues that linguistic universals are biologically wired (in the *Language Acquisition Device*).

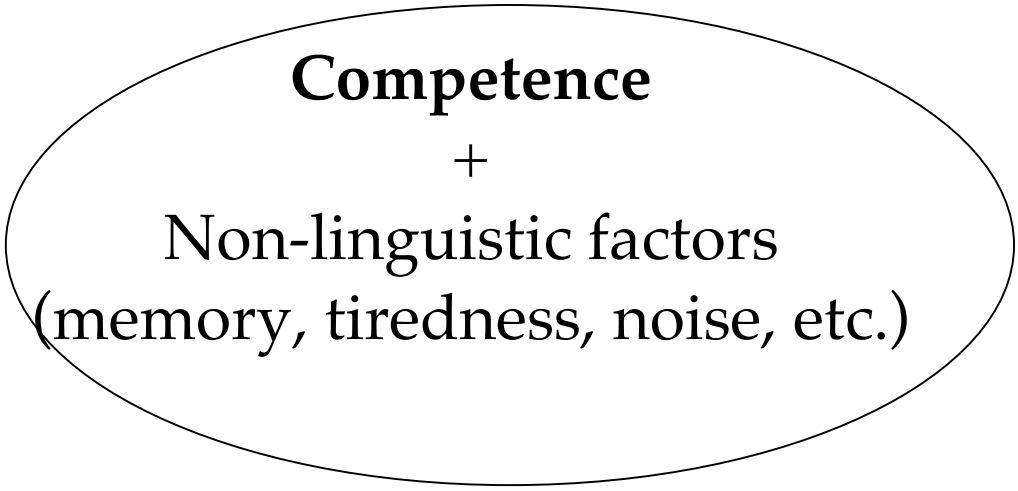
PARTICULAR GRAMMARS
vs.
UNIVERSAL GRAMMAR (UG)

Particular Grammar



COMPETENCE *vs.* PERFORMANCE

Performance



SYNTACTIC JUDGMENTS

(i) *acceptability*

a. I gave back the car to him.
b. I gave the car back to him.
c. I gave him back the car
d. I gave him the car back.
e. * I gave the car to him back.
f. * I gave back him the car.

(ii) *structure*

a. An old man who was wearing a red hat was seen.
b. * An old man saw a woman who was wearing a red hat.
c. An old man was seen who was wearing a red hat.

(there is an apparent problem with (iic) — later…)

SYNTAX IS NOT (JUST) SEMANTICS

(1) ! Colorless green ideas sleep furiously

(2) * Furiously sleep ideas green colorless

(3) * Who do you think that is right?

(4) Who do you think is right?

THE CHOMSKYAN LINGUIST'S JOB

The task of the linguist devising a grammar which models the linguistic competence of the fluent native speaker is:

…to devise a set of rules/principles which are:

- **finite** (because the brain is finite!)
- specify how to form, interpret, and pronounce an **infinite** set of grammatical/well-formed sentences (cf. *The cat on the mat in the bedroom next to the bathroom…*)

HOW TO ACHIEVE THIS TASK?

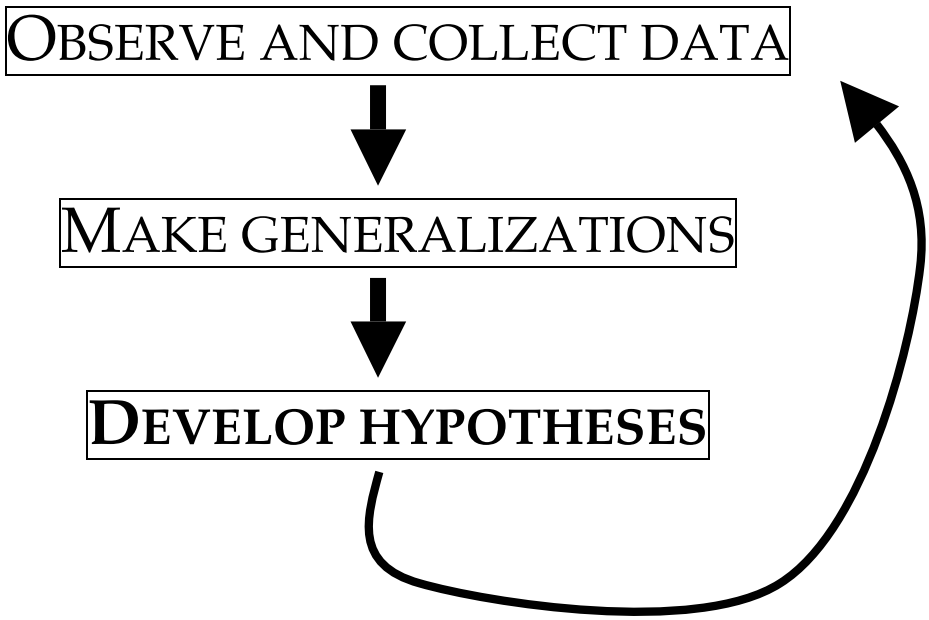
(i) start with an initial question about the phenomenon to be studied;

(ii) collect a set of data relevant to the phenomenon;

(iii) hypothesize a set of principles/rules which account for the data;

(iv) test the hypothesized rules/principles against further data.

INITIAL QUESTION



DESCRIPTIVE RULES
vs.
PRESCRIPTIVE RULES

Examples of prescriptive rules:

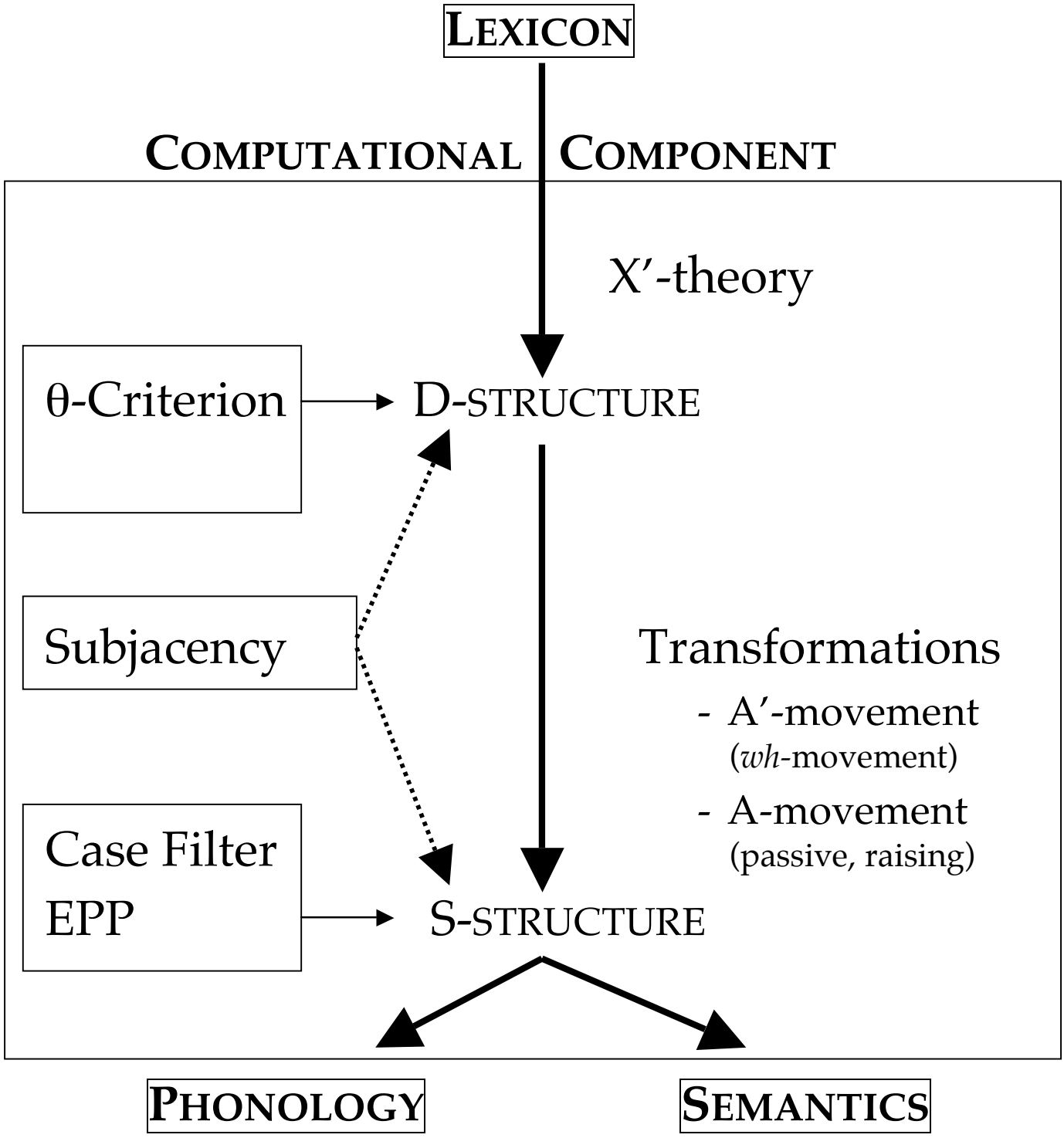
- Never end a sentence with a preposition
- Use *whom* not *who*
- Don't split infinitive

(5) a. What are you looking for?
    b. For what are you looking?

(6) a. Who did you see?
    b. Whom did you see?

(7) a. I want to carefully discuss this issue.
    b. I want carefully to discuss this issue.

A SCHEMA OF OUR SYNTACTIC THEORY



2. (REVIEW OF) PHRASE STRUCTURE

Today's class, at home, and next two classes:

1. Some terminology: structural relations
2. X' Theory
   ("X-bar theory": the original notation was $\overline{X}$.)
3. Functional Categories

SOME PHRASE STRUCTURE RULES FOR ENGLISH

Phrase Structure (PS) rules such as the following were used to describe English phrase structure.

(8) S → NP (Aux) VP

(9) S' → *that* S

(10) NP → (Det) (AP*) N (PP*)

(11) VP → (AdvP) V (NP*) (PP*) (AdvP*)

(12) VP → V S'

(13) PP → (Mod) P NP

(14) AP → (Mod) A (PP)

(15) AdvP → (Mod) Adv (PP)

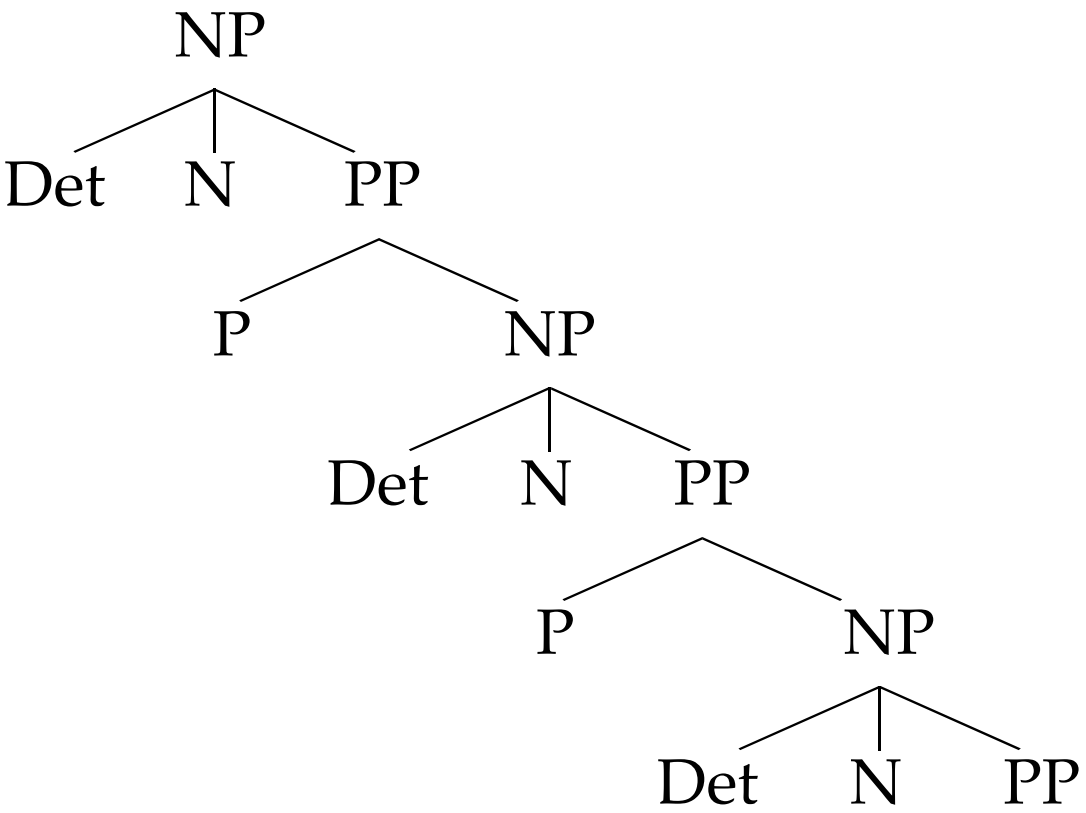
These PS rules are interesting because they allow us to explain how humans can produce and understand sentences of prodigious length… yes, sentences of human language are "recursive".

RECURSION I: AN EXAMPLE

- Two rules allow us to indefinitely embed one NP inside of another

(16) a. **NP → (Det) (AP*) N (PP)** [= (10)]
b. **PP → (Mod) P NP** [= (13)]

(17)



<u>For example</u>:

(18) The cat on the mat in the bedroom next to the bathroom…

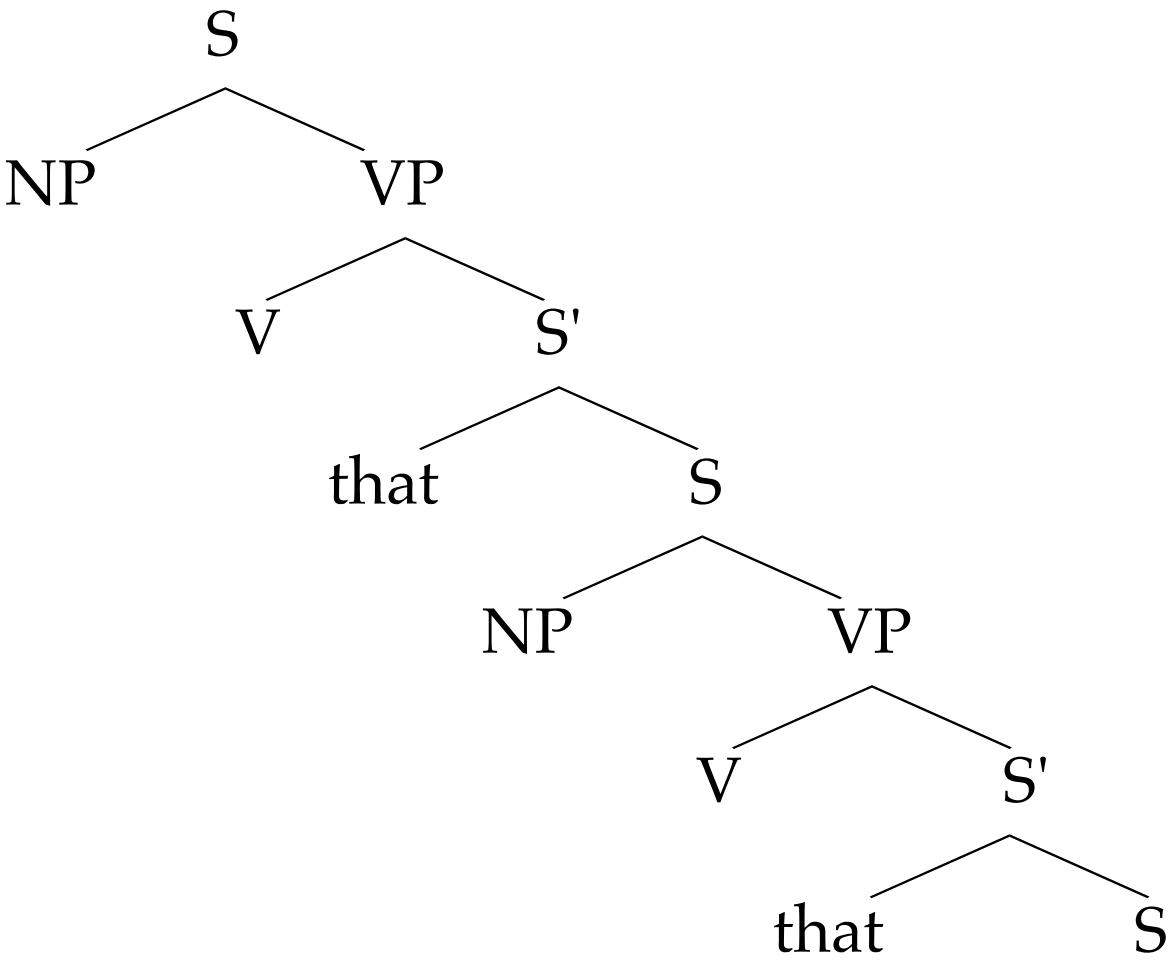
RECURSION II: ANOTHER EXAMPLE

- Three rules allow us to indefinitely embed one S inside of another

(19)

a.	**S**	→	**NP (Aux) VP**	[= (8)]
b.	**S'**	→	***that* S**	[= (9)]
c.	**VP**	→	**V S'**	[= (12)]

(20)



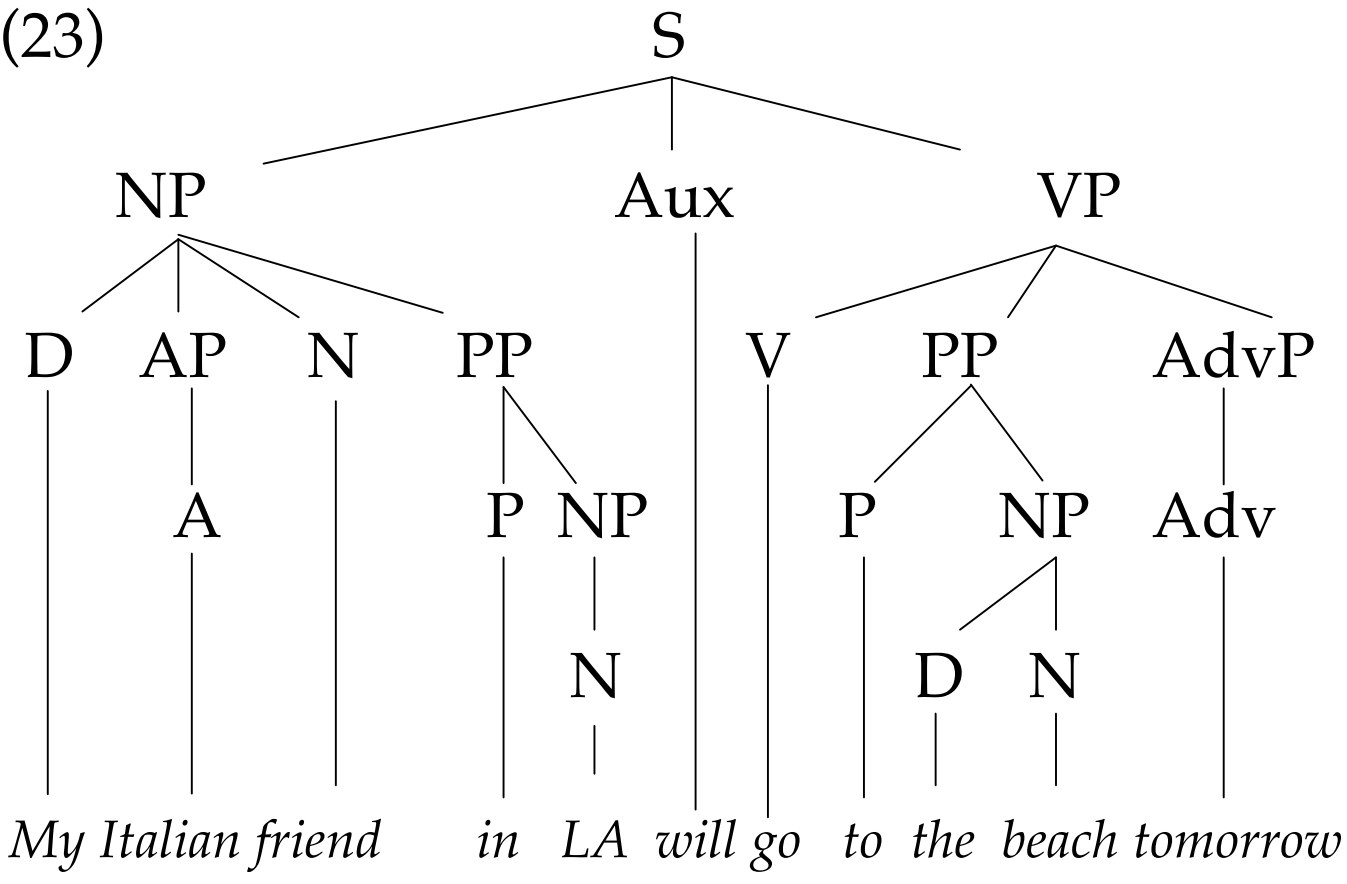
(21) John believes that Bill thinks that Sue ate.

SYNTACTIC TREES

The PS rules also allow us to build complex syntactic trees like the following:

(22) My Italian friend in LA will go to the beach tomorrow.

(23)



RELATIONS BETWEEN THE PARTS OF A TREE

Before we go any further, let's go over some terminology (possibly from last semester).

Here are a few terms that you should know well enough to feel comfortable using. Use the tree above as a point of reference.

- BRANCH:
  a line connecting two parts of a tree
- NODE:
  the terminal point (the beginning or the end) of a branch
- BRANCHING NODE:
  a node from which more than one branch starts
- LABEL:
  the name given to a node (e.g. N, VP, S, etc.)

- DOMINANCE:
  A node α dominates a node β if and only if β is higher up in the tree than β and you can trace a line from α to β going only downwards.

- IMMEDIATE DOMINANCE:
  A node α immediately dominates a node β if and only if α dominates β and no other node intervenes between α and β.

- ROOT NODE:
  the node that dominates every other node and is dominated by no other node

- TERMINAL NODE:
  a node that does not dominate any other node

- NON-TERMINAL NODE:
  a node that dominates at least one other node

- MOTHER:
  α is the mother of β if α immediately dominates β.

- DAUGHTER:
  α is the daughter of β if β immediately dominates α.

- SISTERS:
  Two nodes that share the same mother node.

- CONSTITUENT:
  The set of ALL nodes that are immediately dominated by the same single node.

And, one last important one…

- C-COMMAND:
  A node α c-commands a node β if and only if the first branching node that dominates α dominates β and neither α nor β dominate the other.

Replace the book definition on *p. 36*:

- A node α c-commands a node β if and only if the first branching node that dominates α dominates β.

What's different about our definition and the book's definition?

A consequence of our definition of C-command:

- A node α c-commands its sisters and every node its sisters dominates.