

**Agenda:** evidence of and models for complex structure in language

**I. A highly ambiguous sentence** From last lecture:

“I saw her duck with a telescope.”

Many interpretations are possible, but these do *not* correspond to *all* possible combinations of possible interpretations of the various “sub-units”.

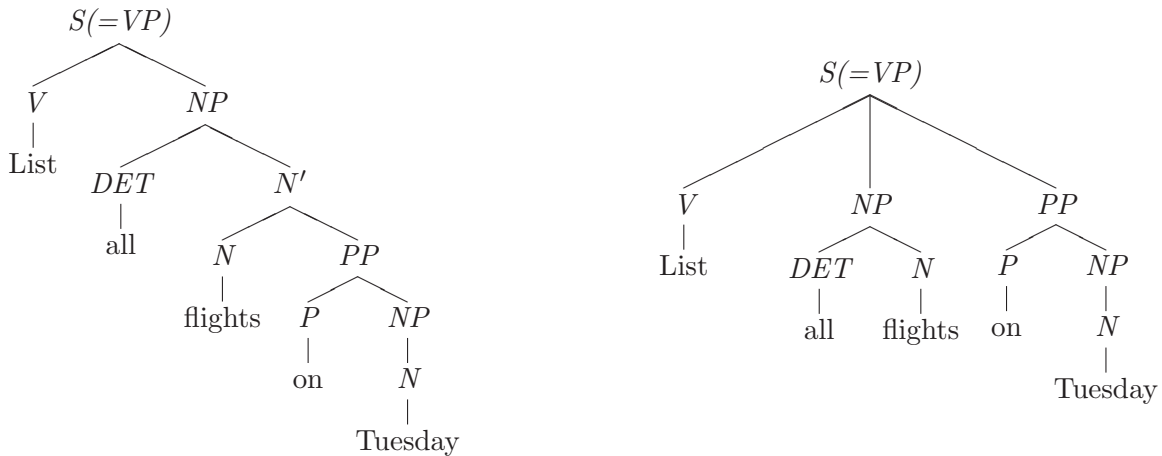
**II. Evidence for constituents** Consider the sentence

“List all flights on Tuesday.”

Are there natural “chunks”, or *constituents*?

1. “List all flights when?” vs. “List all what Tuesday?”
2. “On Tuesday, list all flights” vs. “Flights on, list all Tuesday”
3. “List ... all ... flights [...] on Tuesday” vs. “List ... all ... flights on ... Tuesday”
4. “All flights on Tuesday, please”

**III. Tree representation of (syntactic) sentence structure**



$NP$ =noun phrase;  $VP$ =verb phrase;  $PP$ =prepositional phrase.  $N'$  (pronounced “N-bar”) is a “bare noun phrase”. The labels just above the leaves represent parts of speech (POSS);  $DET$ =determiner.

**IV. X-bar schemas** Briefly, the main idea is that (in English) a “motif” is the following type of constituent structure:

