Chapter 4, sections 4.6-4.10:

Agreement
(and other cooccurrence restrictions)
Revisited

Reminder: Last time we...

- Replaced atomic-valued VAL features with list-valued ones.
- Generalized Head-Complement and Head-Specifier rules, to say that heads combine with whatever their lexical entries say they should combine with.
- Introduced the Valence Principle to "cancel" things off the COMPS and SPR lists.

The Parallelism between S and NP

- Motivation:
 - pairs like *Chris lectured about syntax* and *Chris's lecture about syntax*.
 - both S and NP exhibit agreement
 - The bird sings/*sing vs. The birds sing/*sings
 - this/*these bird vs. these/*this birds
- So we treat NP as the saturated category of type *noun* and S as the saturated category of type *verb*.

Question: Is there any other reason to treat V as the head of S?

- In standard English, sentences must have verbs. (How about non-standard English or other languages?)
- Verbs taking S complements can influence the form of the verb in the complement:
 - I insist/*recall (that) you be here on time.
- Making V the head of S helps us state such restrictions formally

A possible formalization of the restriction on *insist*

$$\begin{bmatrix} \text{HEAD} & \textit{verb} \\ \\ \text{VAL} & \begin{bmatrix} \text{SPR} & \left\langle \text{NP} \right\rangle \\ \\ \text{COMPS} & \left\langle \begin{bmatrix} \text{HEAD} & \begin{bmatrix} \textit{verb} & \\ \text{MOOD} & \textit{subjunctive} \end{bmatrix} \\ \\ \text{VAL} & \begin{bmatrix} \text{COMPS} & \left\langle & \right\rangle \\ \\ \text{SPR} & \left\langle & \right\rangle \end{bmatrix} \end{bmatrix} \end{bmatrix}$$

Note that this requires that the verb be the head of the complement. We don't have access to the features of the other constituents of the complement.

An Overlooked Topic: Complements vs. Modifiers

- Intuitive idea: Complements introduce essential participants in the situation denoted; modifiers refine the description.
- Generally accepted distinction, but disputes over individual cases.
- Linguists rely on heuristics to decide how to analyze questionable cases (usually PPs).

Heuristics for Complements vs. Modifiers

- Obligatory PPs are usually complements.
- Temporal & locative PPs are usually modifiers.
- An entailment test: If X Ved (NP) PP does not entail X did something PP, then the PP is a complement.

Examples

Pat relied on Chris does not entail Pat did something on Chris Pat put nuts in a cup does not entail Pat did something in a cup Pat slept until noon does entail Pat did something until noon Pat ate lunch at Bytes does entail Pat did something at Bytes

Agreement

- Two kinds so far (namely?)
- Both initially handled via stipulation in the Head-Specifier Rule
- But if we want to use this rule for categories that don't have the AGR feature (such as PPs and APs, in English), we can't build it into the rule.

The Specifier-Head Agreement Constraint (SHAC)

Verbs and nouns must be specified as:

$$\begin{bmatrix} \text{HEAD} & \left[\text{AGR} & \mathbb{1} \right] \\ \text{VAL} & \left[\text{SPR} & \left\langle \left[\text{AGR} & \mathbb{1} \right] \right\rangle \right] \end{bmatrix}$$

The Count/Mass Distinction

- Partially semantically motivated
 - mass terms tend to refer to undifferentiated substances (air, butter, courtesy, information)
 - count nouns tend to refer to individuatable entities (bird, cookie, insult, fact)
- But there are exceptions:
 - *succotash* (mass) denotes a mix of corn & lima beans, so it's not undifferentiated.
 - *furniture*, *footwear*, *cutlery*, etc. refer to individuatable artifacts with mass terms
 - *cabbage* can be either count or mass, but many speakers get *lettuce* only as mass.
 - borderline case: data

Our Formalization of the Count/Mass Distinction

• Determiners are:

- [COUNT –] (*much* and, in some dialects, *less*),
- [COUNT +] (*a, six, many, etc.*), or
- lexically underspecified (*the*, *all*, *some*, *no*, etc.)
- Nouns select appropriate determiners
 - "count nouns" say SPR <[COUNT +]>
 - "mass nouns" say SPR <[COUNT -]>
- Nouns themselves aren't marked for the feature COUNT
- So the SHAC plays no role in count/mass marking.

