Chapter 12, Sections 12.1-12.3

Raising
Where We Are & Where We’re Going

• In the last two weeks, we have seen a kind of subject sharing -- that is, cases where one NP served as the SPR for two different verbs. Examples?

• Last week, we looked at “dummy” NPs -- that is, non-referential NPs. Examples?

• Today, we’re going to look at the kind of subject sharing we saw with *be* in more detail.

• Next time, we’ll look at another kind of subject sharing, using dummy NPs in differentiating the two kinds.
What Makes This Topic Different

• The phenomena we have looked at so far (agreement, binding, imperatives, passives, existentials, extraposition) are easy to pick out on the basis of their form alone.

• In this chapter, we look at constructions with the general form NP-V-(NP)-to-VP. It turns out that they divide into two kinds, differing in both syntactic and semantic properties.
The Central Idea

- *Pat continues to avoid conflict* and *Pat tries to avoid conflict*
  both have the form NP-V-to-VP

- But *continues* is semantically a one-place predicate, expressing a property of a situation (namely, that it continues to be the case)

- Whereas *tries* is semantically a two-place predicate, expressing a relation between someone who tries and a situation s/he tries to bring about.

- This semantic difference has syntactic effects.
The Status of Infinitival *to*

- It’s not obvious what part of speech to assign to *to*. 
- It’s not the same as the preposition *to*:
  - The preposition marks goal arguments or directions, but the infinitival marker is semantically empty
  - Prepositions don’t take VP complements
- We call it an auxiliary verb, because this will make our analysis of auxiliaries a little simpler.
The Lexical Entry for Infinitival \textit{to}

\[
\langle \text{to}, \langle 1, \text{val} \rangle \rangle
\]

\[
\langle \text{ARG-ST}, \langle \text{SYN}, \langle \text{HEAD, } \langle \text{FORM base} \rangle \rangle \rangle, \langle \text{SEM}, \langle \text{INDEX s} \rangle \rangle \rangle
\]

\[
\langle \text{SEM}, \langle \text{RESTR \langle \rangle} \rangle \rangle
\]
The Syntax of Infinitival *to*

\[
\begin{bmatrix}
\text{SYN} & \text{HEAD} & [\text{FORM base}]
\end{bmatrix}
\begin{bmatrix}
\text{INF} & +
\end{bmatrix}
\begin{bmatrix}
\text{AUX} & +
\end{bmatrix}
\]

- This makes it a verb, because AUX is declared on *verb*
- \([\text{INF } +]\) uniquely identifies the infinitival *to*
- Verbs select complements with different combinations of FORM and INF values, e.g.
  - complements of *condescend* are \([\text{FORM base}]\) and \([\text{INF } +]\)
  - complements of *should* are \([\text{FORM base}]\) and \([\text{INF } -]\)
  - complements of *help* are \([\text{FORM base}]\)
- The meaning of \([\text{AUX } +]\) becomes clear in Chapter 13.
The Argument Structure

• What kind of constituent is the second argument?
• The tagging of the first argument and the SPR of the second argument is exactly like *be*. 
Dummies and *continue*

- Some examples:
  
  *There continue to be seats available.*
  *It continues to matter that we lost.*
  *Advantage continues to be taken of the innocent.*
  
  *It continues to be seats available.*
  *There continues to matter that we lost.*
  *Advantage continues to be kept of the innocent.*

- Generalization: Non-referential NPs can appear as the subject of *continue* just in case they could be the subject of the complement of *continue*.
A New Type, for Verbs like *continue*

*Subject-Raising Verb Lexeme (srv-lxm):*

\[
\begin{array}{c}
\text{ARG-ST} \left\langle \begin{array}{c} 1 \\
\text{SPR} \\
\text{COMPS} \\
\text{INDEX} \\
\end{array} \right\rangle \\
\text{SEM} \left[ \text{RESTR} \left\langle \left[ \text{ARG} \ s_2 \right] \right\rangle \right]
\end{array}
\]

• Notes on the ARG-ST constraints
  • The subject sharing is just like for *be* and *to*: the subject of *continue* is also the subject of its complement
  • *continue* imposes no other constraints on its subject

• Note on the SEM constraint
  • The index of the complement must be an argument of the predication introduced by the verb
The Lexical Entry for continue

\[
\langle \text{continue}, \begin{bmatrix}
\text{srv-lxm} \\
\text{ARG-ST} \\
\text{SEM}
\end{bmatrix}
\begin{cases}
\text{ARG-ST} \quad \langle X, [\text{INF} +] \rangle \\
\text{SEM} \\
\text{RESTR} \quad \langle [\text{RELN} \text{ continue}] \rangle
\end{cases}
\rangle
\]
Entry for *continue*, with Inherited Information

\[
\begin{align*}
&\langle continue , \rangle \\
&\langle ARG-ST \rangle \\
&\langle SEM \rangle
\end{align*}
\]
Key Property of Subject-Raising Verbs

The subject plays no semantic role in the predication introduced by the SRV itself. Its semantic role (if any) is only in the predication introduced in the complement.
Hence, constraints on the subjects of SRVs are imposed by their complements

- SRVs take dummy subjects when and only when their complements do.
- SRVs take idiom chunk subjects when and only when their complements do.
- Passivizing the complement of an SRV doesn’t change the truth conditions of the whole sentence:
  
  *Skeptics continue to question your hypothesis*  
  *Your hypothesis continues to be questioned by skeptics*
Next time, we’ll...

- Look at superficially similar examples like *Pat tries to avoid conflict* and see that they behave quite differently.

- Present a formal analysis of the difference.

- Compare our analysis of the difference with the traditional transformational one.