# Syntax 1: Semantics and Raising
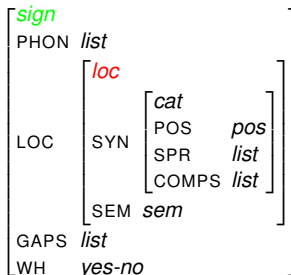
Prof. Gert Webelhuth

University of Frankfurt

## The structure of the sign

- Grammar 4 adds semantic properties to (some) signs. To this end, a new attribute SEM is added at the same level where the syntactic properties are stored as the value of the attribute SYN.
- The syntactic and semantic information of the sign is grouped together as the value of a new attribute LOC(AL).
- The value of LOC plays a very important role in the grammar:
  1. The members of SPR and COMPS lists are of type *local*, i.e. when one sign selects a specifier or a complement, it specifies the element's *local* properties: its syntax and its semantics.
  2. The members of GAPS are also of type *local*. That means that a filler and the gap it fills share one *local* value.

Here is the new structure of the sign. It will remain constant from now on:

$$
\begin{bmatrix}
\textit{sign} \\
\text{PHON} \ \textit{list} \\
\text{LOC} \ \begin{bmatrix}
\textit{loc} \\
\text{SYN} \ \begin{bmatrix}
\textit{cat} \\
\text{POS} \quad \textit{pos} \\
\text{SPR} \quad \textit{list} \\
\text{COMPS} \ \textit{list}
\end{bmatrix} \\
\text{SEM} \ \textit{sem}
\end{bmatrix} \\
\text{GAPS} \ \textit{list} \\
\text{WH} \quad \textit{yes-no}
\end{bmatrix}
$$

# Subject raising verbs

- There is a special verb class called subject raising verbs.
- These verbs are easy to identify by applying the following tests.
- If the verb passes theses tests, then it is a subject raising verbs.
- Usually, if the verb passes one of these tests, then it passes all of them.

If the verb V takes a non-finite VP-complement headed by the verb *rain*, then V must take the idiomatic word *it* as its subject.

Illustration:

(1)  a.   It*idiom* will$_V$ rain.
     b.   * The student will$_V$ rain.

If the verb V takes a non-finite VP-complement headed by a verb that selects an idiomatic NP as its subject, then V must take this idiomatic NP as V's subject.

Illustration:

(2) a.   All hell*idiom* will$_V$ break*idiom* loose.
    b.  * An accident will$_V$ break*idiom* loose.

# Subject raising verb Test Nr. 3

If the verb V takes a non-finite VP-complement headed by a verb that imposes semantic requirements on its subject, then V must impose those same semantic requirements on V's subject.

Illustration:

The verb *kill* only requires of its subject that it express some kind of force that kills the referent of the direct object. That force can be alive or not:

(3)  a.   The student will$_V$ kill the politician.
     b.   The accident will$_V$ kill the politician.

In contrast, the verb *assassinate* requires its subject to express a person. Forces cannot assassinate anyone!

(4)  a.   The student will$_V$ assassinate the politician.
     b.   * The accident will$_V$ assassinate the politician.

The same case can be made with the verbs *like* (which requires a living being as its subject) or *happen* (which requires an event as its subject).

# Subject raising verb Test Nr. 4

If the verb V takes a non-finite VP-complement headed by a verb that selects a subject of a particular syntactic category, then V must select a subject of the same syntactic category.

Illustration:
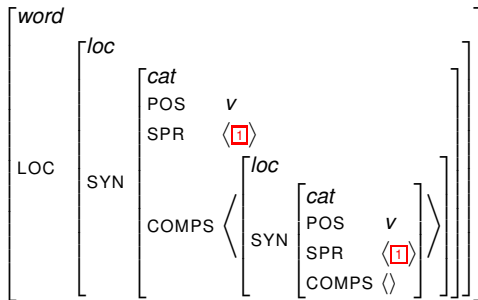
The verb *like* requires its subject to be an NP:

(5)  a.   [$_{\mathrm{NP}}$ The student] will$_V$ like the politician.
     b.  * [$_{\mathrm{S}}$ That the student smokes] will$_V$ like the politician.

In contrast, the verb *annoy* allows its subject to be an NP or an S:

(6)  a.   [$_{\mathrm{NP}}$ The student] will$_V$ annoy the politician.
     b.   [$_{\mathrm{S}}$ That the student smokes] will$_V$ annoy the politician.

## Capturing the behavior of subject raising verbs

If we give subject raising verbs the following two lexical properties, then their behavior follows immediately:

1. Subject raising verbs select non-finite VPs, i.e. verbal expressions that are COMPS-complete, but still have a non-empty SPR list.

2. Subject raising verbs identify the member of their own SPR list with the unexpressed textscspr of their VP-complement.

Formally, all subject raising verbs look as follows:

$$
\begin{bmatrix}
word \\
LOC \begin{bmatrix}
loc \\
SYN \begin{bmatrix}
cat \\
POS & v \\
SPR & \langle \boxed{1} \rangle \\
COMPS \left\langle \begin{bmatrix} loc \\ SYN \begin{bmatrix} cat \\ POS & v \\ SPR & \langle \boxed{1} \rangle \\ COMPS & \langle \rangle \end{bmatrix} \end{bmatrix} \right\rangle
\end{bmatrix}
\end{bmatrix}
\end{bmatrix}
$$

# Homework

Which of the following two verbs is a subject raising verb? Prove your answer by applying the 4 tests for subject raising verbs to each verb!

1. seem
2. try