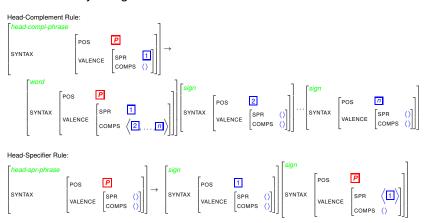
Grammar 19

Gert Webelhuth

University of Frankfurt

The grammar so far

There are only two grammar rules:

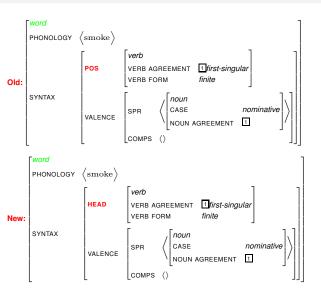


- Note that in each phrase there is one daughter whose part of speech value is also the phrase's part of speech value.
- When we write more rules, that will also be the case.

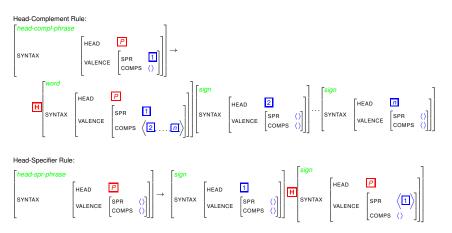
The notion of head of a phrase

- We can capture this generalization by singling out one and only one of the daughters of a phrase as special: the phrase's head daughter.
- Question: What is special about the relationship between a phrase and its head daughter? Answer: The two signs share certain properties.
- These properties we have so far collected as the value of the attribute PART OF SPEECH.
- In order to signal that it is these properties that are shared between mother and head daughter, we will rename this attribute now as HEAD.

Replacing the feature PART OF SPEECH by the feature HEAD



Every phrase has a HEAD daughter



Note: the HEAD features of the phrase are also the head features of its HEAD daughter in both cases!

We will require this to be the case for all syntactic rules:

The Head Feature Principle (HFP)

The Head Feature Principle (HFP)

The value of HEAD of a phrase is also the value of HEAD of the phrase's head-daughter.

This allows us to simplify the rules as follows

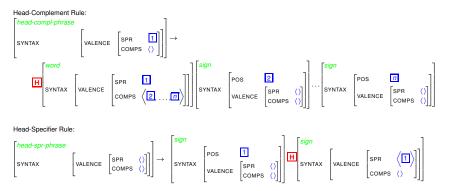


Illustration: the Head-Complement Rule

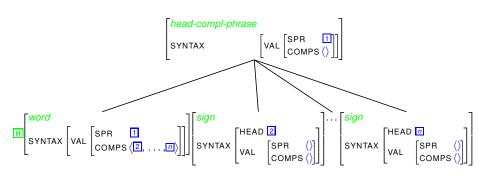
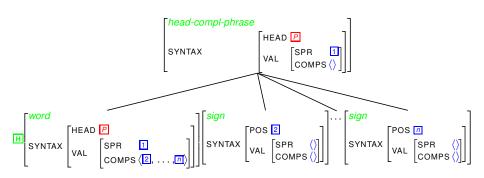


Illustration: the Head-Complement Rule + HFP



- The information in blue and green is a consequence of the Head-Complement Rule.
- The information in red is a consequence of the Head Feature Principle.

Excercises

- Write lexical entries in the new head format for the words apple and eaten!
- By hand, draw a tree for the following sentences and then compare your solutions to the solutions the grammar produces (but only after you have drawn the trees by hand!):
 - a. Kim smokes.
 - b. The student likes Kim.
- Oraw a schematic tree for head-specifier phrases in the format of the tree on slide 9!