## Syntax Seminar (BBN-ANG-252): Handout 4

ELTE, Spring 2024

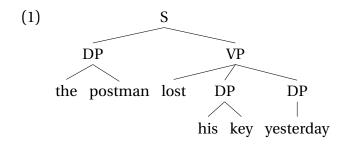
Ekaterina Georgieva ekaterina.georgieva@nytud.hun-ren.hu

This is a summary of BESE: Ch. 3.1.

## 1 Recap

- Rewrite rules: how structures of various kinds decompose into their constituent parts
- The head provides the label for the phrase.
- Distinction between arguments (external argument vs. internal argument (=complement)) and adjuncts

But: the way we have been representing complements and adjuncts in the trees does not reflect the differences between them. Also, what is the position of the external argument?



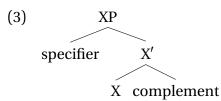
 $\leftrightarrow$  we need a more elaborated structure for (1)

## 2 X-bar theory

- The **Projection Principle** requires that all lexical information (for category, subcategorisation, and theta-role assignment) must be syntactically represented – the **X-bar theory** provides the technical format in order to obey this.
- Rewrite rules:

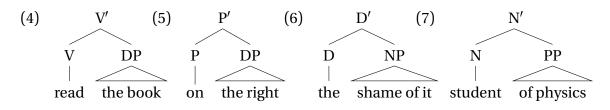
(2) a.	$X' \rightarrow X YP$	complement rule
b.	$XP \rightarrow YP X'$	specifier rule
c.	$X^n \rightarrow X^n, Y/YP$	adjunction rule

• Based on (2a,b) we can update the minimal structure of each phrase as in (3):



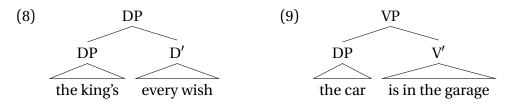
The head  $(X/X^0)$  projects its categorial status to the X' (pronounced: X-bar) and ultimately to the XP (the maximal projection).

- The immediate constituents of X' are the head X and its complement (2a).
- In English, the complement follows the head (this is why English is called a *head-initial* language; in Hungarian, for example, many phrases are *head-final*).



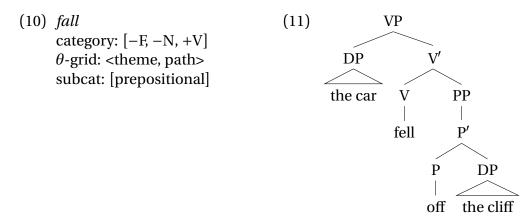
• The rule in (2b) introduces a structural position called the *specifier*: it is a phrase and it precedes the X'. The specifier and X' are the immediate constituents of XP.

Examples of specifiers: possessors in the DP (8), theme arguments of verbs (9)



NB: We will talk more about other types of verb arguments next week

• The lexical entry of *fall* is given in (10); (11) provides an illustrative example.

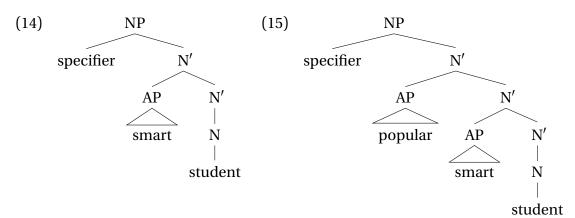


- (12) a. The boy is in the classroom.
  - b. The ball dropped.
- How are theta-roles related to syntactic positions?
  - (13) the Uniform Theta-role Assignment Hypothesis (UTAH) A  $\theta$ -role P is assigned in the same structural configuration in all structures in which it is present.
- ↔ the theme argument is always assigned to the specifier of the verb phrase

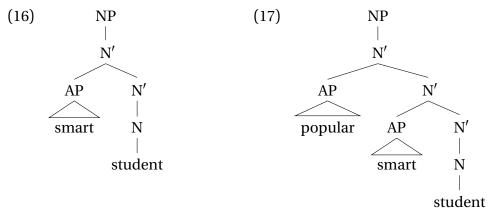
• The adjunction rule in (2c) states that it is possible to adjoin to X<sup>n</sup>, i.e., to XP, X' or X<sup>0</sup>. The adjunct may be a word (Y) or a phrase (YP). The comma indicates that the linear order of X<sup>n</sup> and the adjunct is not fixed.

NB: while adding arguments always raises the bar up one notch, adjunction does not raise the bar level of the projection!

- 1. Adjunction to X<sup>0</sup>: compounds, e.g., *winter coat*
- 2. Adjunction to X': adjectives modifying a noun (14); adjunction is recursive (15). Note: Noun phrases may also contain PP-adjuncts; we will study them later.



A technical note: You don't necessarily need to have the word 'specifier', if the specifier position is not filled; the trees below are identical to (14) and (15). What is important is to keep the two levels, N' and NP.



More examples of adjunction to X':

(18) a. John is *very* cold.

b. My professor lives *right* in the middle of nowhere.

- 3. Adjunction to XP: relative clauses (see textbook; to be covered later in this course)
- How about adjuncts to verb phrases?

In the verb phrase, we find one very important type of adjunction to  $X^0$ , which will be covered in HO5. Adjunction to the X' and XP-levels is also possible and we will study it later in this course.

## 3 Homework

- Find the adjuncts and put them in square brackets:
  - (19) a. The little boy gave a nice drawing to his mother for her birthday.
    - b. The teacher wanted to know whether the new students would know what to do when they arrive.
    - c. Why do you ask me whether I want to buy a new computer next year?
    - d. The new guest professor of mathematics will probably arrive at the recently renovated railway station at 2:15.
    - e. How can you decide whether a loaf of bread on the shelf is fresh or not?
- Determine arguments and adjuncts in (20). For arguments, determine theta roles and grammatical functions.
  - (20) Yesterday the girl in a blue dress sent a nice postcard to the boy with glasses.
- Determine the argument/adjunct status of the PPs in (21) by applying the diagnostics discussed in HO3.
  - (21) a. Mary stayed [in the bed].
    - b. Mary slept [in the bed].

Now consider (22). Can you come up with tests that help us determine the argument/adjunct status of the PPs in the noun phrases below?

- (22) a. the book [of poems]b. the book [with a red cover]
- Draw the trees for (23):
  - (23) a. a big evil vicious dog
    - b. the teacher of English
    - c. John's destruction of the city
    - d. the ball drop on the floor