

October 7, 2005

CLASS 12: X'-THEORY

Ok, back to phrase structure rules. Most of the PS rules reviewed last class can be schematized as follows:

$XP \rightarrow \begin{cases} (ZP) X' \\ \text{or} \\ X' (ZP) \end{cases}$ ZP is called the *specifier*

$X' \rightarrow \begin{cases} (YP) X' \\ \text{or} \\ X' (YP) \end{cases}$ YP is called an *adjunct*
(*optional and recursive*)

$X' \rightarrow \begin{cases} (WP) X \\ \text{or} \\ X (WP) \end{cases}$ WP is called
the *complement*

NB: X, Z, Y, W = V, N, P, A... (*and more to add*)

X'-THEORY (OR X-BAR THEORY)

According to the X'-schema given above, every phrase has (at least) three levels:

- XP – the maximal projection
- X' – an intermediate projection
- X⁰ – the head

Now, instead of having separate PS rules for nouns (N), verbs (V), adjectives (A)..., *that encode a lot of the same information*, we have **one set of basic PS rules** that each category must conform to.

X'-Theory constrains the types of phrase structure rules that we find in natural languages.

For instance, X'-Theory explains why we don't find PS rules such as:

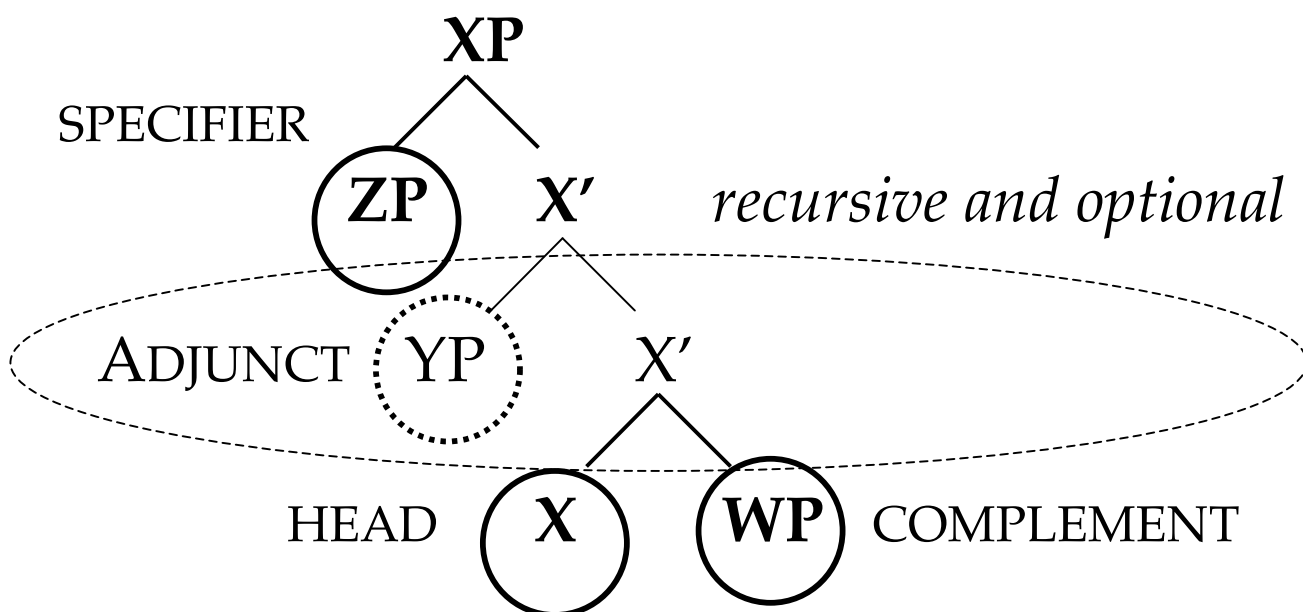
(1) * AP → V NP

2 EXAMPLES OF TREE SCHEMAS ACCORDING TO X'-THEORY

*(many others are mathematically possible,
but are not found in the world's languages!)*

- This is just a **schema (not an actual tree!)**, since there are no actual syntactic categories, but just abstract node labels
- This is just **one of the many tree schemas** generated by X'-Theory

(2) SPECIFIER and ADJUNCT to the left of the HEAD, COMPLEMENT to the right (English...)



(3) SPECIFIER, ADJUNCT, and COMPLEMENT to the left of the HEAD (as in Japanese and others...)

