

Ling 102 Section

October 12

Section
Wednesdays 7:15–8:00
Boylston 335

Office Hours
Tuesdays 3:00–5:00
2 Arrow St Room 423

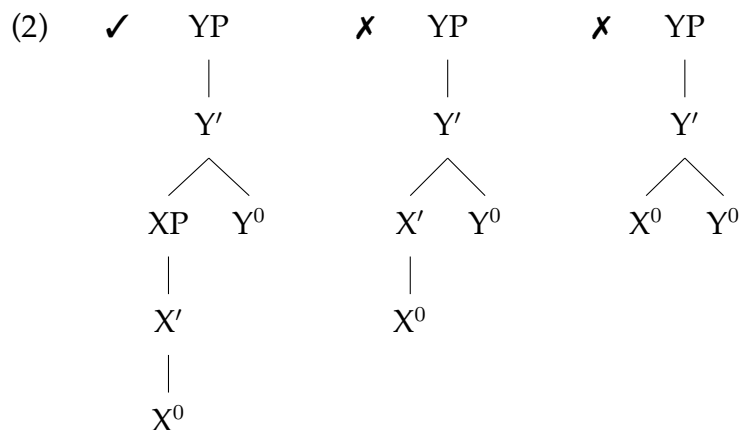
X-Bar Theory

X-bar theory assumes that categories come in three kinds: heads, bars, and phrases.

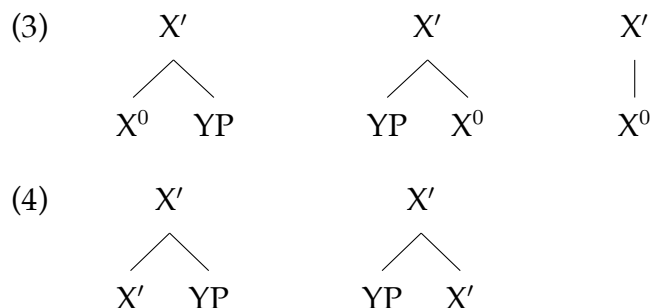
Kind of Label	Nominal	Adjectival	Verbal	Prepositional
(1) Head	N or N ⁰	A or A ⁰	V or V ⁰	P or P ⁰
Bar	N'	A'	V'	P'
Phrase	NP	AP	VP	PP

Heads are end nodes of a tree. Bars and phrases are not: they must contain at some level a head.

Heads can be thought of as the minimal (or lowest) projection of some label, while phrases are the maximal (or highest) projection of a label. Bars represent any intermediate structure between the smallest and largest part of a projection

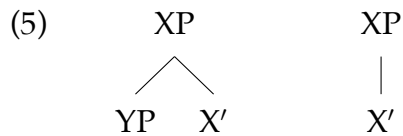


Heads necessarily are end nodes, while bars can either consist of a head of their same label (3), or a bar of their same label (4).



The YP in a structure like (3) is the complement, while the YP in a structure like (4) is an adjunct.

Finally, phrases consist of a bar of their same label and (possibly) another phrase on their left, called a specifier (5).



Thus, complements, adjuncts, and specifiers can all be defined by their sister and parent relationships.

(6)

	Complement	Adjunct	Specifier
Sister	head	bar	bar
Mother	bar	bar	phrase
Example	$\begin{array}{c} \text{X}' \\ \swarrow \quad \searrow \\ \boxed{\text{YP}} \quad \text{X}^0 \end{array}$	$\begin{array}{c} \text{X}' \\ \swarrow \quad \searrow \\ \boxed{\text{YP}} \quad \text{X}' \end{array}$	$\begin{array}{c} \text{XP} \\ \swarrow \quad \searrow \\ \boxed{\text{YP}} \quad \text{X}' \end{array}$
Diagrams	(3)	(4)	(5)

Complements and specifiers are typically understood as modifying some essential aspect of the phrase they modify, while adjuncts less so. You can think of complements as an inherent argument of the head, while the specifier 'finishes off' the phrase to make it complete.

Within a language, there will be multiple complement/adjunct/specifier rules for a given category.

(7) Some English Verbal Rules:

- a. Complement Rule 1: $V' > V^0 \text{ NP}$
- b. Complement Rule 2: $V' > V^0 \text{ CP}$
- c. Adjunct Rule 1: $V' > V' \text{ PP}$
- d. Adjunct Rule 2: $V' > \text{AdvP } V'$

(8) Some English Nominal Rules (ignoring DP theory):

- a. Complement Rule 1: $N' > N^0 \text{ PP}$
- b. Complement Rule 2: $N' > N^0 \text{ CP}$
- c. Adjunct Rule 1: $N' > \text{AP } N'$
- d. Adjunct Rule 2: $N' > N' \text{ PP}$
- e. Specifier Rule 2: $\text{NP} > \text{Det } N'$

Because adjunct rules create bars from bars, bars and adjuncts can stack within a projection; something which complements and specifiers cannot.