

ENG423A: Current Issues in Linguistics

LECTURES ON GOVERNMENT AND BINDING

Lectures on Government and Binding (LGB: 1982)

Leading Ideas:

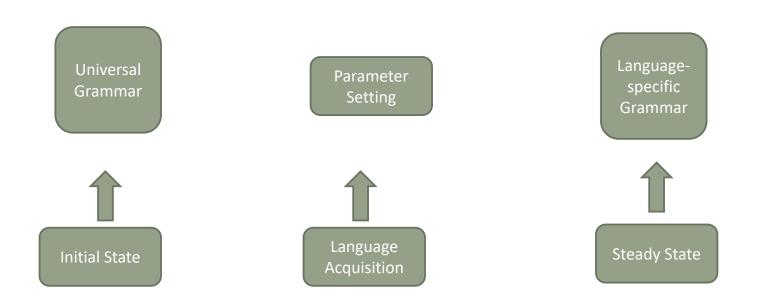
- a) Revamping the form of grammar
- b) Shift from rules to representations
- c) Principles and parameters
- a) An architecture of grammar with the **relationship between syntax and semantics redefined**
- b) A rule-based theory evolves into a theory based on **well-formedness constraints** on representations.

The Constraints are articulated through a set of principles

c) The facts of invariance and diversity of languages are addressed through Principles and Parameters.

Universals stated in a manner as to have **parametric options** built into them.

Unification: Language Acquisition and Language Typology



Principles and Parameters

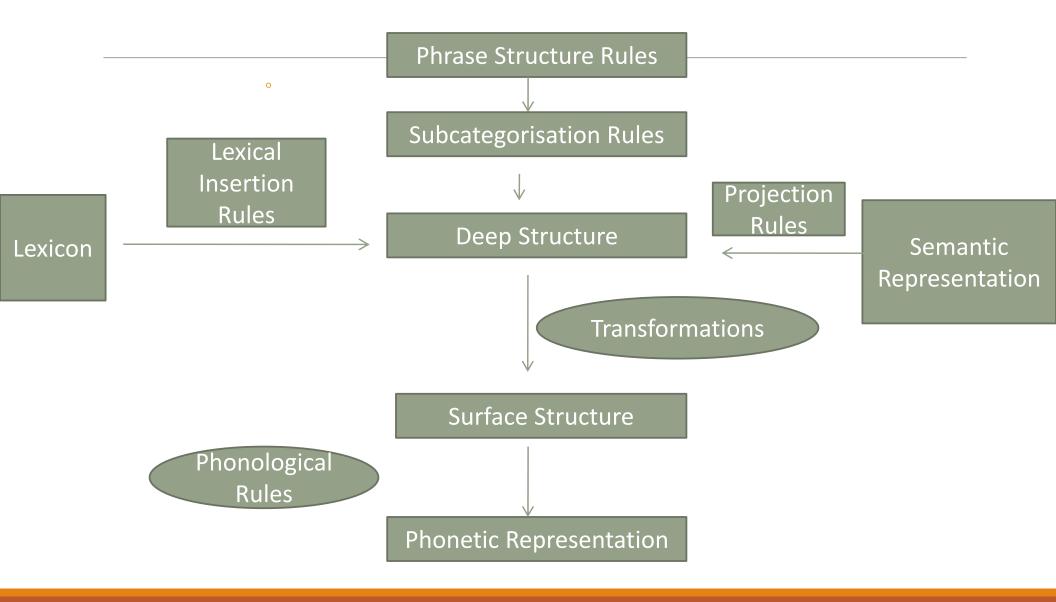
The theory of initial state of linguistic knowledge and its mapping into the steady state through Principles and Parameters

The tension between descriptive and explanatory adequacies sought to be resolved through the notion of parameterization.

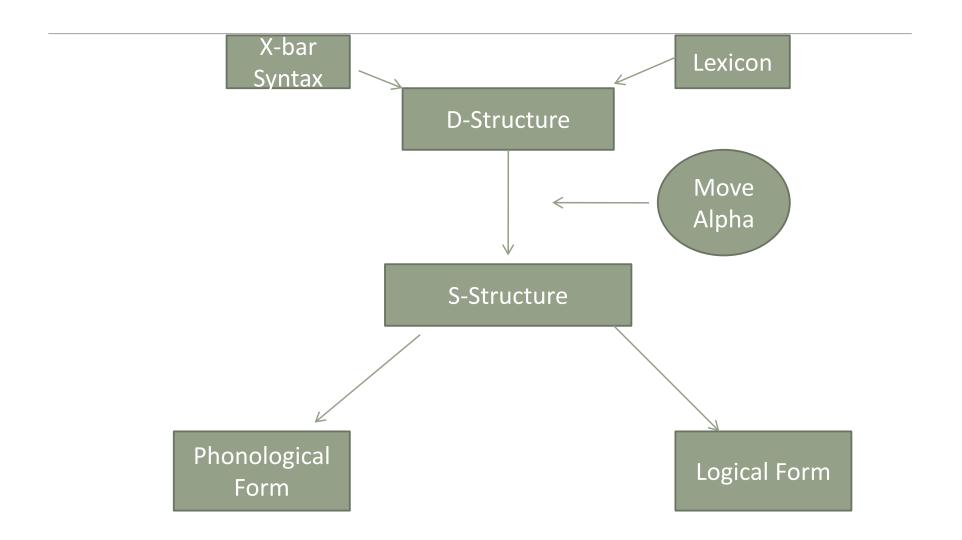
Theory of initial state mapped into the steady state also becomes a theory of language universals and language typology.

Linguistic typology addressed for the first time through principles and parameters.

Standard Theory



LGB: Form of Grammar



LGB: Form of Grammar

D-structure is projected from the lexicon.

X-bar theory is a constraint on the D-structure representation

Move alpha maps D-structure to S-structure.

Move Alpha is a free movement transformation which can move anything from anywhere to anywhere.

Constraints on Move Alpha follow from independent principles.

S-structure maps into PF and LF components where rules of phonetic form and logical (semantic) form work.

Major components of LGB theory

- a) Subsystems of Principles
- b) Subsystem of Rules

Subsystems of Principles

- 1. X-bar theory: constrains phrase structure in D- and S-structure
- 2. Government: a structural relation between constituents
- 3. Case theory: constrains the morphological form of nominals
- 4. Thematic theory: constrains argument structure in syntax
- 5. Binding: constrains the relationship between referentially null elements and their antecedents (e.g., reflexives such as him/herself)
- 6. Bounding: constrains movement how far an element can move
- 7. Control: constrains the antecedent assignment for phonologically null elements (empty categories)

An obvious redundancy between 5, 6, and 7

X-bar theory

Phrase-structure is governed by X-bar theory

All phrasal categories (NP, VP, PP, AP etc.) are governed by the X-bar syntax

- a) All phrases are of the type XP, where X stands for N, V, P, A etc.
- b) The phrase XP or X" has the structure spec- X'
- c) X' has the structure X⁰-comp

spec: Specifier

comp: Complement

X-bar theory

X-bar expansion:

 $X'' \rightarrow \operatorname{spec} x'$

 $X' \rightarrow X comp$

NP, VP, PP, AP etc. are all phrases of the XP type

NP = XP, where X=N

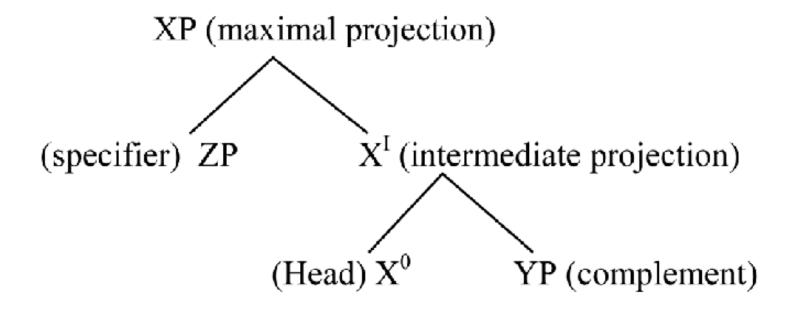
PP =XP, where X=P

VP = XP, where X=V etc.

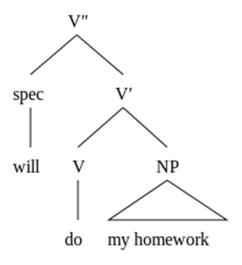
A category neutral schema of expansion.

Thus, PS Rules are replaced by X-bar syntax.

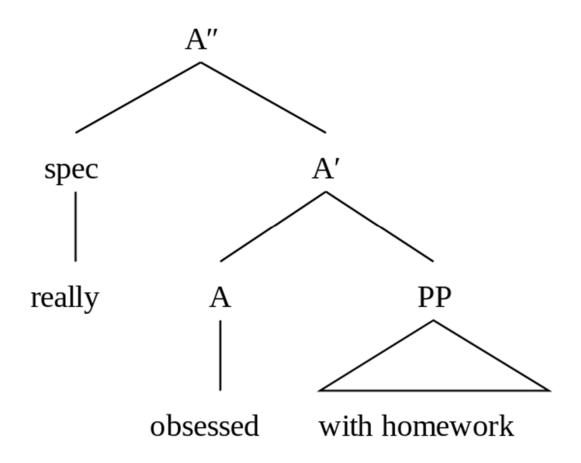
X-bar Syntax



Verb Phrase (VP/V")

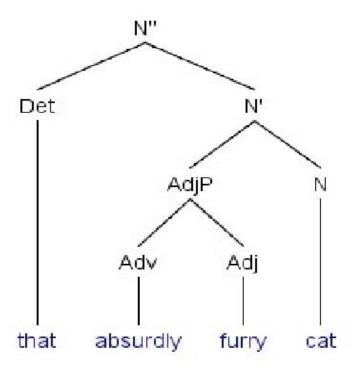


Adjectival Phrase (AP/A")

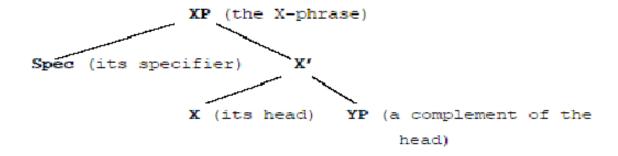


Noun Phrase (NP/N")

that absurdly furry cat



What about S?



S IS A PHRASE OF THE TYPE INFLECTION PHRASE OR IP.

X-bar Theory

Constituent order: X-bar Theory

1. A language-independent and category-independent expansion

Generalised across categories

Claim to universality

Parametrising the universal:

Head Directionality parameter

 $(X^0$ -comp or comp- X^0)

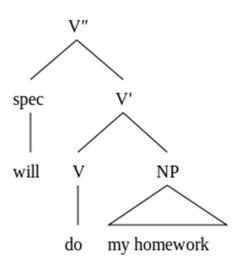
Constituent order variations across languages are accounted for through the Head Directionality parameter

Hindi vs. English

Head Directionality Parameter

Head initial for English

Head Final for Hindi



Subsystem of Rules

Move Alpha: Move any constituent from anywhere to anywhere.

Two kinds of movement:

NP movement:

The student was lifted by the biker.

D-structure: e was lifted the student by the biker

Move-Alpha

S-structure: The student; was lifted t; by the biker

Wh-movement

Whom will Thelma meet after lunch?

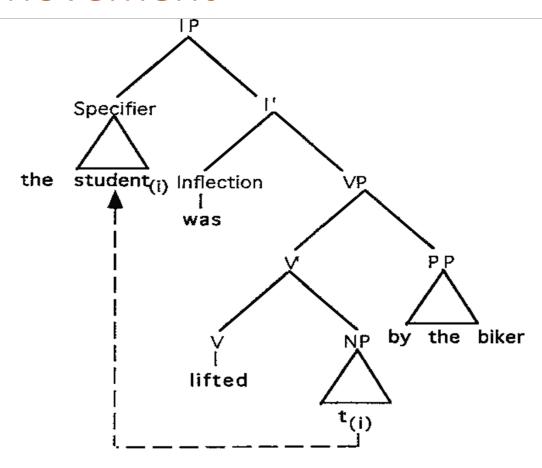
D-structure: Thelma will meet whom after lunch

Move -Alpha

S-structure: whom; will Thelma meet t; after lunch

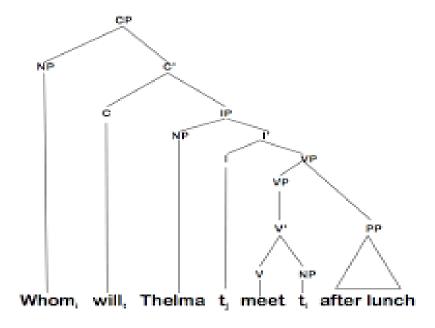
Overgeneration is constrained by the principles of the grammar.

NP Movement



The $student_{(i)}$ was lifted $t_{(i)}$ by the biker.

Wh-movement



Constraining Move Alpha: Case Theory

- a) Case Filter: An NP must receive case either at the D-structure or S-structure
- b) Case Conflict: No NP can receive more than one cases

Case Assignment: Case is assigned in certain positions (case positions).

Case Assignment is parameterised.

Case Theory constrains movement.

NP-movement is from caseless position to case position.

Wh-movement is from case position to caseless position

A movement which violates Case Filter or Case Conflict is ruled out.

Constraining Move-Alpha

Thematic Theory

Theta-Criterion (θ -criterion): Each argument bears one and only one θ -role, and each θ -role is assigned to one and only one argument.

Movement is from θ position to θ -bar position.

Lectures on Government and Binding (LGB)(1982)

Leading Ideas:

- a) Revamping the form of grammar
- b) Shift from rules to representations
- c) Principles and parameters
- a) An architecture of grammar with the relationship between syntax and semantics redefined
- b) A rule-based theory evolves into a theory based on well-formedness constraints on representations.

The Constraints are articulated through a set of principles

c) The facts of invariance and diversity of languages are addressed through Principles and Parameters.

Universals stated in a manner as to have parametric options built into them.