

PRINCIPLES AND
PARAMETERS *OF*
UNIVERSAL GRAMMAR

- **Universal Grammar (UG)**
 - “The system of principle,.
 - Conditions and rules that are properties of all human languages the essence of human language”.
- (Chomsky 1976)

- ⇒ The term principles and parameters theory has, however become more popular in recent years as it conveys that unique central claim of the theory that language knowledge consists of principles universal to all languages and parameters that vary from one language to another.
- ⇒ The combination of Universal Grammar with principles and parameters theory inevitably leads to a complex overall theory involving several sub
- – theories, but at the same time it creates a new simplify: knowledge of language comes down to variations in a small number of properties.
- ⇒ UG is a theory of knowledge, not of behaviour, its concern is with the internal structure of human mind.
- ⇒ UG theory holds that the speaker knows a set of principles that apply to all languages, and parameters that vary within clearly defined limits from one language to another.
- ⇒ UG theory is not making vague or unverifiable suggestions about properties of the mind but precise statements based on specific evidence.

PRINCIPLES AND PARAMETERS OF UG

- **1. Structure Dependency**

- Structure – dependency asserts that knowledge of language relies on the structural relationship in the sentence rather than on the sequence of words. To understand this, we first need to establish the concept of phrase structure.
- ⇒ A major assumption in linguistics since the 1930s has been that sentences consist of phrases structural groupings of words: sentences have phrase structure.
- **For example:**
- The child drew an elephant. It breaks up into
- Noun Phrase (NP) the child
- Verb Phrase (VP) drew an elephant the VP further breaks up into a verb (V)
- Sentence
- drew
- Noun phrase (NP) an elephant.



- **Labeled bracketing**
- [S [NP The child] [vp drew [NP an elephant]]] Rewrite rule (Chomsky 1957)
- S NP VP
- VP VNP
- () Consist of

- **Major aspect of the principle of structure dependency**
- Movement in the sentence is not just a matter of recognizing phrases and then of moving them around but of moving the right element in the right phrase.
- \Rightarrow Structure dependency can therefore be put forward as a universal principle of language: whenever elements of the sentence are moved to form passives, questions, or whatever, such movement takes account of the structural relationships of the sentence rather than the linear order of the words; all known formal operations in the grammar of English, or of any other language are structure dependent.

- **2. The Language Faculty**

- Chomsky says:
- Human mind has separate part for language acquisition and it differs with the learning of other things.
- \Rightarrow The Principle of structure dependency does not necessarily apply to all aspects of human thinking, it is not at all clear that such UG Principles could operate in areas of the mind other than language.
- \Rightarrow 'Language faculty' separates from other language faculties such as mathematics, vision, logic and soon.

- Language knowledge is separate from other forms of representation in
- the mind; it is not the same as knowing mathematical concepts, for example.
- ⇒ Thus the theory divides the mind into separate compartments separate modules, each responsible for some aspect of mental life.
- ⇒ UG is a theory only of the language module, which has its own set of principles distinct from other modules and doesn't inter relate with them.
- ⇒ This contrasts with cognitive theories that assume the mind is a single unitary system, for example connectionism.
- ⇒ In some ways this resembles the nineteenth century tradition of 'faculty psychology' which also divided the mind into autonomous areas (Foder, 1983).
- ⇒ We speak of the body in terms of organs the heart, the lungs, the liver etc. why not talk about mind in terms of mental organs the logic organ, the mathematics organ, the common sense organ, the language organ?
- ⇒ "We may usefully think of the language faculty, the number faculty, and others as "mental organs", analogous to the heart or the visual system or the system of motor coordination and planning"
- (Chomsky 1980)
- ⇒ The language faculty is concerned with an attribute that all people possess
- ⇒ So Chomsky asserts that language knowledge is independent of the other aspects of mind.

- **3. The Head Parameter**

- It specifies the order of certain elements in a language.
- ⇒ One distinctive claim is that the essential element in each phrase is its head.

- **Thus the verb phrase**

- Drew an elephant has a head verb (drew)

- **Noun phrase**

- The child has a head noun (child)

- **Prepositional phrase**

- By the manager has a head preposition (by).

- **Complements**

- An important way in which language very concerns where the head occurs in relationship to other elements of the phrase, called complements.

- ⇒ The head of the phrase can occur on the left of the complements or on their right.

- ⇒ In the NP:

- “Education for life”

- the head noun education appears on the left of the complement ‘for life’.

- In the VP:
- Showed her the way.
- One head verb 'showed' appears on the left of the complement 'her' and 'the way'.
- ⇒ In the PP:
- In the car
- The head preposition 'in' appears on the left of the complement 'the car'. There are two possibilities for the structure in human languages.
 - ✓ Head-left
 - ✓ Head-right
- ⇒ Chomsky (1970) suggested that the relative position of heads and complements needs to be specified only once for all the phrases in a given language.
- ⇒ Human beings know that phrases can be either head-first or head-last; an English speaker has learnt that English is head-first; a speaker of Japanese that Japanese is head-last and soon.
- ⇒ The variation between languages can now be expressed in terms of heads occur first or last in the phrase. This is head parameter, the variation in order of elements between languages amounts to a single choice between head first or head last.

4. The Projection Principle

- Speaker of a language knows
 - 1) What do words in language mean?
 - 2) How they can be combined to make sentences?
- ⇒ The theory integrates the syntactic description of the sentence with the properties of lexical items via the projection principle, which requires the syntax to accommodate the characteristic of each lexical item.
- ⇒ It has always been recognized that there are restrictions on which words can occur in which constructions.
- ⇒ Some verbs are followed by object NP.
 - Ayesha prefers could drink but not Ayesha prefers.
- ⇒ Other verbs are not followed by NP, for instance peter fainted. Not:
 - Peter fainted the cat.
- ⇒ The linguistic description expresses this through the lexical entry that each item has in the lexicon.
- ⇒ The lexical entry for each verb in the dictionary has to show whether or not it is followed by a NP, i.e. whether it is transitive or intransitive.
- ⇒ A particular verb has its own combination of possibilities.
 - The verb 'want' for example can be followed by an object NP.
- I want some money
- or a phrase starting with to:

- I want to leave but it may not be followed by a phrase starting with ‘that’
- I want that bill leaves. Unlike for instance, believe I believe that bill left. Hence the entry of ‘want’ is something like:
- Want verb (-NP/To-phrase) where the slash ‘/’ shows either / or the projection principle is a further universal of human language integrate their syntactic rules with their lexical entries in this fashion.
- ⇒ There is no logical necessity for language to be this way and no obvious means by which a child could acquire it, the projection principle also seems a built in feature of the mind.

5. The Government Theory

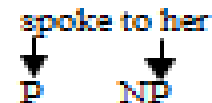
- This refers to a syntactic relationship of high abstraction between ‘a governor’ and an element that it governs. ■

⇒ A verb governs its object NP as in:



Where the verb ‘likes’ governs the NP ‘me’.

A preposition also governs its NP the traffic warden



The preposition ‘to’ governs the NP ‘her’

