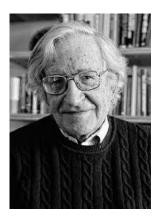
# Unit three: Contemporary approaches to linguistics

## **Lesson 09: Transformational Generative Grammar**



# 1. Who is Chomsky?

Avram Noam Chomsky (born December 7, 1928) is an American linguist, philosopher, cognitive scientist, historian, social critic, and political activist. Sometimes called "the father of modern linguistics", Chomsky is also a major figure in analytic philosophy and one of the founders of the field of cognitive science.

### 2. What is TGG?

Transformational-generative Grammar is a system of language analysis of the relationship between sentence elements and its possible sentences of a language and rules (i.e. transformations). TGG is a theory of grammar that provides a model for the description of all languages. It was introduced by Noam Chomsky, and accompanied by the publication of his book Syntactic Structures in 1957 (the classical theory). Chomsky's early work falls into two related points:

- 1. Criticism of structuralism
- 2. New formulation of linguistic theory

e.g.

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- active sentence "Ahmed ate the cake"
- corresponding passive, "The cake was eaten by Ahmed."

2.

- Samir saw Meriem is related to questions,
- "Whom [or who] did Samir see?" and "Who saw Meriem?"

The two sentences appear to be very different on the surface, **TGG** tries to show that in the "underlying structure" (deeper relations to one another), the sentences are very similar.

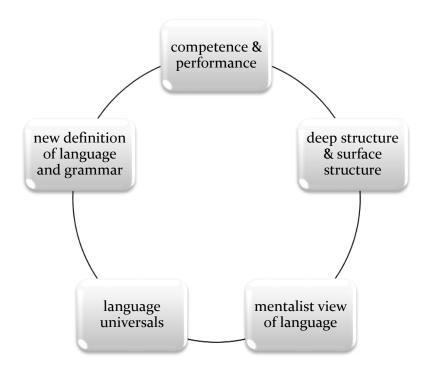
Transformational grammar suggests a "deep structure" and a "surface structure" for the relationship of such sentences.

For example, "I know a man who flies planes" is the surface form of a deep structure approximately like "I know a man. The man flies airplanes."

The notion of deep structure can be especially helpful in explaining <u>ambiguous</u> utterances; e.g., "Flying airplanes can be dangerous" may have a deep structure, or <u>meaning</u>, like "Airplanes can be dangerous when they fly" or "To fly airplanes can be dangerous."

# 3. Key concepts in TGG

Criticism of structuralism was the main foundation of transformational generative grammar which brought new concepts and methodology for the language studies.



#### 1. COMPETENCE & PERFORMANCE

Chomsky separates competence and performance; he describes 'competence' as an idealized capacity that is located as a psychological or mental property or function and 'performance' as the production of actual utterances. According to Chomsky (1965) "We thus make a fundamental distinction between competence (the speaker-hearer's knowledge of his language) and performance (the actual use of language in concrete situations)." (p4)

### 2. DEEP STRUCTURE & SURFACE STRUCTURE

Grammatical analysis can be divided into two parts:

- 1. one is about the superficial or apparent structure of sentences,
- 2. The other about the sentences' underlying structure.

For example, we can take the following pair of sentences:

John is easy to please. (object)

Both these sentences have identical surface structures but different deep structures. The surface structure is actually produced structure. It refers to the sentence as it is pronounced or written. The deep structure is the abstract structure that allows the native speaker of a language to know what the sentence means. It may then be said that the deep structure expresses the semantic contents of a sentence, whereas the surface structure of a sentence determines its phonetic form.

#### 3. MENTALIST VIEW OF LANGUAGE

The mentalists school of thought, which is led by Noam Chomsky, claim that a child learns his first language through cognitive learning by natural exposure. Both 'nature' and 'nurture' influence the acquisition of language in children. Chomsky regards linguistics as a subfield of psychology, more especially the cognitive psychology.

## The Language Acquisition Device (LAD)

Chomsky argues that language is so complex that it is almost incredible that it can be acquired by a child in a short time. He further says that a child is born with some innate mental capacity which helps the child to process all the language which he hears. This is called the "Language Acquisition Device" (LAD).

### 4. LINGUISTIC UNIVERSAL

A linguistic universal is a pattern that occurs systematically across natural languages, potentially true for all of them. For example, All languages have nouns and verbs, or If a language is spoken, it has consonants and vowels. Research in this area of linguistics is closely tied to the study of linguistic typology, and intends to reveal generalizations across languages, likely tied to cognition, perception, or other abilities of the mind. Noam Chomsky's proposal of a Universal Grammar was largely pioneered by the linguist Joseph Greenberg, who derived a set of forty-five basic universals, mostly dealing with syntax, from a study of some thirty languages.

## 5. NEW DEFINITIONS OF LANGUAGE AND GRAMMAR ACCORDING TO N. CHOMSKY

- 1. Language as conceived of by Chomsky is "a set (finite or infinite) of sentences, each finite in length and constructed out of a finite set of elements" (Chomsky 1957:13). As he further claims, this holds true for all natural languages since they have "a finite number of phonemes (or letters in its alphabet) and each sentence is representable as a finite sequence of these phonemes (or letters)" (Chomsky 1957:13).
- 2. Thus, a grammar of a language should be thought of as "a device of some sort for producing the sentences of the language under analysis" (Chomsky 1957:13). Such a linguistic analysis of a language should attempt to sort out the grammatical sentences from the ungrammatical ones and study the structure of the grammatical sentences. Furthermore, the grammar of a language will generate all the grammatical sentences of a language and none of the ungrammatical ones.