**Lecture Five**

 **Chomsky’s Contribution to Linguistics**

1. **Generative Grammar**

For Chomsky, every person who knows language must have the ‘grammar’ of that language inside him somewhere. In other words, every language speaker has a store of knowledge which enables him to produce and comprehend an infinite number of utterances. Hence, a linguist who is writing a grammar should make guesses or hypotheses about this internalized system. The linguist should not focus primarily with the speaker’s *performance,* rather he should be concerned with ‘*competence*’ which is the internalized set of principles that enable a person who knows a language to recognize and produce well-formed utterances and reject ill-formed ones.

For Chomsky, a grammar which describes actual utterances is a *descriptive grammar*, and a grammar which consists of a set of rules which specify sequences of language that are possible and those impossible is a *generative grammar.* Thus, the goal of a grammar is to account for the native speaker's “competence” which enables them to produce or generate new sentences. The notion of generative grammar was invented to make *explicit* the notion of “competence”; a generative grammar is a formal system (of rules, later of principles and parameters) which makes explicit the finite mechanisms available to the brain to produce infinite sentences in ways that have empirical consequences and can be tested as in the natural sciences. However, Chomsky followed Bloomfield and Harris in excluding meaning from the analysis of language; he argued that there is no one-to-one relation between meaning and form; therefore, a grammar has to treat forms on their own.

1. **Transformational Generative Grammar**

The notion of *transforms* was first introduced by ‘Harris’, Chomsky –influenced by Harris- kept and considered it in his book ‘*Syntactic Structures’*(1957), and He developed it with further details in his book ‘*Aspects of the Theory of Syntax’* (1965) and later ‘*Abstractness and Transformational Orders’*.

In ‘*Syntactic Structures’,* Chomsky divided transformations into two basic types: ‘obligatory’ and ‘optional’. Obligatory transformations are those set of transformations whose application is necessary in every derivation of grammatical sentences. For example, in English every grammatical sentence must undergo the number agreement transformation (to ensure subject-verb agreement), since this transformation must be applied in every derivation, it is said to be obligatory. In other words, the failure to apply this transformation results in the production of ungrammatical sentences.

Example: (1) The teacher explain the lesson (no number agreement – ungrammatical sentence)

 (2) The teacher explains the lesson (number agreement – grammatical sentence)

The set of remaining transformations, those that are not obligatory constituted the set of optional transformations such as negative, question, and passive transformations.

Examples: a. John helped Mary

 b. John did not help Mary (Negative transformation)

 a. The cat killed the bird

 b. Did the cat kill the bird?

 a. Peter opened the door

 b. The door was opened by Peter

note that ‘a’ versions in the previous examples are grammatical without the application of optional transformations.

 Given the distinction between obligatory and optional transformations, the notion of the ‘*Kernel sentence’* can be defined as follows: a kernel sentence is any surface structure in which only the set of obligatory transformations are applied, thus, kernel sentence is a simple, active, affirmative, declarative (S, A, A, D) sentence.

 Transformational generative grammar is a theory that holds that a sentence typically has two levels of structure: *the deep structure* which is abstract and hidden and not accepted in our everyday language and *the surface structure* which is accepted in our everyday life. The first represents *meaning* while the second represents *form.* Chomsky suggested that deep structures are related to surface structures by processes called *Transformations.*

For examples to transform the sentence ‘The author will write another book’ to the negative form, we have first the idea of negation in mind with the kernel sentence:

(neg) The author will write another book

But this form is not accepted in everyday life, rather we accept the form:

The author will not write another book

The meaning is the same in the deep and the surface structure. ‘Not’ represents the idea of negation that is the same in all languages but expressed differently, it is not a negation in itself. We get the surface structure via applying transformations. Hence, the surface and the deep structures are linked to each other by transformations.

 To solve the problem of sentence structure (ambiguity) and meaning that occurred with previously suggested grammars such as Immediate Constituent Analysis (I.C.A.), Chomsky introduced the notion of *deep* and *surface* structure. He suggested that every sentence has two levels of structure: one is obvious on the surface, and the other is deep and abstract.

In examples such as: - John is anxious to help

* John is difficult to help
* John is ready to eat

Chomsky suggested that we are dealing with sentences which have a similar surface structure but different deep structures.

The situation would be reversed for pairs such as: a- yesterday it snowed

b- it snowed yesterday

In this case, two surface structures share the same deep structure.

1. **Universal Grammar**

Initiating the era of transformational generative grammar, Chomsky redirected the goal of linguistic theory towards attempting to provide a rigorous and formal characterization of the notion “possible human language,” called “Universal Grammar.” In his view, the aim of linguistics is to go beyond the study of individual languages to determine what the universal properties of human language in general are, and to establish the “universal grammar” that accounts for the range of differences among human languages. The theory of grammar relies on certain general principles which govern the form of the grammar and the nature of the categories with which it operates. These principles are conceived of as universal properties of language, properties that are biologically innate.

Chomsky maintained that rather than being born blank slates, children have a genetic predisposition to acquire linguistic knowledge in a highly specific way. In other words, the child’s construction of the internalized grammar of his/ her language (or the I- Language) is predetermined by the human genetic endowment, a “language Faculty” containing “Universal Grammar” which provides the nature and number of choices that need to be made when internalizing the grammar of a particular language.

Since this theory began, it has evolved through versions called “Standard Theory,” “Extended Standard Theory” (and “The Lexicalist Hypothesis”), “Trace Theory,” “Government and Binding” (later called “Principles and Parameters” approach), and finally “the Minimalist Program.”