**Univeristy of Guelma 1st year Linguistics**

**Department of English Mrs. BOUDRA Amina**

**LESSON THREE: LINGUISTS’ CONTRIBUTION**

**3. NOAM CHOMSKY**

**Biography**

Noam Chomsky is an American linguist and one of the most influential scholars of the twentieth century. He has proved himself in multiple fields like linguistics, philosophy, cognitive science, logic, political criticism, human rights activities, social criticism, and so on. He was born in Philadelphia, Pennsylvania on December 7, 1928. He is currently working as a Laureate Professor of Linguistics at the University of Arizona and Professor Emirates at the Massachusetts Institute of Technology. Chomsky has written more than 150 books on linguistics, politics, war, human rights, and mass media.

**Contribution to Linguistics**

Chomsky is called the father of modern linguistics for his major contribution to linguistics.

According to Chomsky, linguistics should reach two main goals:

a) a theory of language

b) a theory of language acquisition

A theory of language will aim to characterize what language is, its essential properties which distinguish it from other means of communication, the similarities and differences between all the languages of the world. A theory of language acquisition will seek to discover the way children acquire their native language.

In order to attain a theory of language, the linguist must start by describing particular languages in detail, that is, by giving detailed grammars of individual languages. This is called "Particular Grammar". The next stage is to formulate the general (or universal) features shared by these languages. This is called "Universal Grammar".

A grammar, in Chomsky's view, is a systematic description of the competence of the native speaker of a language which enables him to produce, understand and pronounce all the possible sentences of his language. ***Competence***, which is our unconscious knowledge of language, is contrasted by Chomsky with ***performance***, which is the actual use of language or the realization in different situations of the linguistic rules we have acquired unconsciously as children.

**Competence and Performance:** Competence, according to Chomsky, is the native speaker’s knowledge of his language, the system of rules he has mastered, his ability to produce and understand a vast number of new sentences. Performance is the study of actual sentences and the actual use of the language in real-life situation. So, the speaker’s knowledge of the structure of a language is his linguistic competence and the ways in which he uses it is his linguistic performance. Competence is, then, an underlying mental system, it underlines actual behaviour, linguistic institution ability to analyse language, detecting ambiguities, ignoring mistakes, understanding new sentences, producing entirely new sentences. Whereas competence is a set of principles which a speaker masters, performance is what a speaker does. The former is a kind of code; the latter is an act of encoding or decoding.

Recall that Chomsky's distinction between **competence** and **performance** is similar to de Saussure's division "langue"- "parole", which reveals that Chomsky has been influenced by de Saussure's ideas and methodology in linguistics. However, there is a difference between Chomsky's and de Saussure's divisions. De Saussure's langue/parole dichotomy has a **sociological orientation** since for him "langue" is the collective sum of rules used by all the members of a speech-community in society, and this knowledge is passed on from one generation to another, and "parole" means individual speech in society, that is, anything that a native speaker might produce or understand. But Chomsky's distinction between competence and performance has a **psychological orientation** in the sense that **competence refers to the unconscious knowledge of language that native speakers store in their brains during early childhood**, in addition to the fact that the distinction draws on the assumption that language reflects the activity of the mind. Chomsky regards linguistics as part of cognitive psychology and thinks that the description and explanation of the brain (mental ability) is one of the most essential goals of linguistics.

Chomsky states that there are **two types of competence**: **"pragmatic competence"** which is the ability to use the native language appropriately (in the right context) to satisfy certain needs, and **"grammatical competence"** which includes our syntactic, semantic and phonological abilities.

Syntactic abilities include the ability to combine words into grammatical sentences, and the ability to distinguish grammatical sentences from ungrammatical ones:

(1) a. He is talking nonsense.

b. I'll find you a seat.

(2) a. \*He is nonsense talking.

b. "You I'll find a seat.

Semantic abilities include the ability to notice ambiguity in sentences. For example,

(3) I like young girls and boys.

means either

(4) a. I like young girls and young boys.

or b. I like young girls, and boys in general.

In (4a), young qualifies girls and boys whereas in (4b) it qualifies only girls.

Semantic abilities also include the ability to distinguish between semantically well-formed (**acceptable**) and semantically ill-formed (**unacceptable**) sentences.

Thus, a native speaker of English will recognize that (5) below is semantically well-formed, but (6) is not:

(5) Joan wrote an interesting book.

(6) \*An interesting book wrote Joan.

Semantic abilities also involve, for instance, the native speaker's ability to perceive synonymy in expressions: for illustration, any native speaker of English will know that (7) and (8) below convey the same meaning:

(7) John left the room quickly.

(8) John quickly left the room.

A further clarification of the distinction between competence and performance is given. For example the sentence (1) is more acceptable than (2), and (2) is more grammatical than (1)

(1) I called up the man who wrote the book that you told me about.

(2) I called the man who wrote the book that you told me about up.

Acceptability is concept that belongs to the study of performance, whereas grammaticalness belongs to the study of competence. In fact, generative grammar slights study of performance in favor of study underlying competence.

Phonological abilities involve, among other things, the ability of knowing whether a sentence is stressed according to native speakers' intuitions or not. For example, a native speaker of English will notice that (9a) is phonologically well-formed while (9b) is phonologically ill-formed:

(9) a. I noticed the contra'diction.

b.? I noticed the 'contradiction.

Thus, the rules formulated by the linguist should characterize the sentences of the language under study in accordance with the native speakers' intuitions (or competence). The job of the linguist, then, is not only to describe an unlimited number of sentences, but also to put forward a limited number of rules which characterize the regularities in the language in such a way that they correspond to the native speakers' knowledge of their language. To put it differently, the linguist's task is (i) to postulate a finite theory of an infinite number of sentences and (ii) a theory of what the native speaker knows about his language. This is relevant to what Chomsky calls the ***"creativity of language"***, which refers to the native speaker's ability to produce and understand an indefinite number of novel but well-formed sentences. This creativity of language shows according to Chomsky, that language cannot be acquired by imitation, but by internalizing (unconsciously) a set of general rules of how to construct, interpret and pronounce sentences. This constitutes empirical evidence that language is rule-governed. To explain this creativity of language, the linguist must formulate sentence-formation rules, sentence-interpretation rules and sentence- pronunciation rules. Thus, the set of possible well-formed sentences in a language is infinite, whereas the set of rules which generate them is finite.

According to Chomsky, significant headway can be made by some measure of idealization:

Linguistic theory is concerned primarily with an ideal speaker- hearer, in a completely homogeneous speech-community, who knows its language perfectly and is unaffected by such grammatically irrelevant conditions as memory limitations, distractions, shifts of attention and interest, and errors (random or characteristic) in applying his knowledge of the language in actual performance. Chomsky (1965; 3)

For him, a language cannot be represented by a corpus since it contains an infinite number of sentences which may involve hesitations, slips of the tongue, etc.

A record of natural speech will show numerous false starts, deviations from rules, changes of plan in mid-course, and so on. The problem for the linguist, as well as for the child learning the language, is to determine from the data of performance the underlying system of rules that has been mastered by the speaker-hearer and that he puts to use in actual performance. Hence, in the technical sense, linguistic theory is mentalistic, since it is concerned with discovering a mental reality underlying actual behavior. Chomsky (1965: 4)

A language, then, can be represented by means of a limited number of rules which determine the relationship between strings of words in a language. The linguist must devise a theory including a finite set of rules which will account for the well-formedness of sentences in a language. If the linguist is a native speaker of the language he is studying, he can rely on his intuitions to distinguish well-formed utterances from ill-formed ones. These linguistic intuitions are important for the mentalist school, and their use has been regarded as a shortcoming of Chomsky's theory, since they seemingly weaken its scientific character. In other words, it seems that Chomsky's linguistics is moving away from the scientific method which is based on observation, objectivity and empirical analysis. However, it would be interesting to see whether linguistics could make significant progress if a non-cognitive approach were adopted.

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Sociolinguists, philosophers and psychologists have expressed their objection to mentalist linguistics. They have particularly attacked the competence-performance distinction. For instance, the American sociolinguist William Labov claims that the study of an idealized speaker-hearer's language appears to be valid and useful for understanding language rather than one individual's speech. Dell Hymes (another American sociolinguist) argues that the linguistic competence-performance dichotomy neglects the importance of communication. He, accordingly, devises "communicative competence" which means, briefly, the ability to use language appropriately (that is, in approrpiate contexts) to convey a certain message under particular circumstances. A native speaker's linguistic knowledge also comprises his ability to use language appropriately as well as the syntactic, semantic and phonological abilities. As Atkinson et al (1982: 41) notice, this amounts to saying that

Our understanding of language structure will be enriched by studying communication-as-a-whole [...] but this is not self- evidently true and both strategies must be extensively explored in order for the protagonists to have any leverage.

The "tacit knowledge" of native speakers in the competence-performance division has been criticized, too. The claim is that this linguistic knowledge cannot include pragmatic elements such as knowing that the weather is cold in Siberia. The native speaker's explicit knowledge that John loves Mary is well-formed and \*loves Mary John is not, enables us to state that this judgement follows from the tacit knowledge of his language.

For the structuralists, language acquisition includes regularities concerning the distribution of linguistic elements. This distribution is due to acquired linguistic behaviour. For example, an English child learns to place his adjectives before nouns, given his exposure to data as a native language learner. Thus, members of a given speech-community will shape child language according to the principles of reinforcement, discrimination and generalization. This theory was put forward by Skinner in an attempt to account for language acquisition, using the principles of reinforcement of responses. Chomsky managed to discredit Skinner's book Verbal Behaviour (1957) by criticizing the behaviourist theory which is neither convincing nor objective.

At this juncture, we must distinguish between empiricism and rationalism, which are two philosophical trends dealing with the acquisition of knowledge in the broad sense. The role of the mind is more central for rationalism than for empiricism where passive data and patterns are crucial. The empiricist view thus does not value the role of innateness. The latter consists of the innate capacity with which individuals are endowed at birth. The rationalist position is based on the notion of innateness which it attempts to maximize. For the empiricists (or structuralists) the child is only equipped with a minimal set of learning principles, while for the rationalists (or mentalists) the child acquires a complex finite number of rules which determines his linguistic competence in a relatively short period of time because he possesses an innate capacity, or "Language Acquistion Device" as Chomsky calls it, which facilitates language acquisition. A child cannot acquire his native language with such great speed and in such a way if he is endowed only with the empiricist learning procedures.

That human language is acquired rapidly despite its complexity is an argument for the idea that children are endowed with an innate language faculty which makes language acquisition possible in such a short lapse of time. A child normally starts acquiring his language from birth and develops a complete knowledge and competence in it at about four or five years of age (see Atkinson et al, 1982, ch. 2). Some people say that it takes longer, but it depends here on the definition you give to language. Another argument is that native language is acquired with hardly any endeavour and with no formal education in comparison with second or foreign language learning. Furthermore, the child is exposed to a deficient corpus of data including slips of the tongue, false starts, etc.. This claim, however, is debatable since recent research in 'motherese' (the language that the mother talks to her infant) shows that the data to which a child is exposed are not that degenerate since the speech directed at the child is selected: it includes grammatical and meaningful sentences relevant to the immediate environment of the child.