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THE PROCESS OF COGNITIVE GRAMMAR

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Abstract:

The fundamental difference between cognitive grammar and generative grammar is that cognitive ability is offered in generative grammar. However, according to cognitive grammar, no individual cognitive ability is necessary for describing language abilities. Cognitive ability, recognised by psychology and other branches of knowledge, is used to create human language ability. In any grammar, language skills are analysed by describing the nature of grammatical knowledge. The grammatical knowledge of humans is the combination of symbolic units. Those units are members of several categories, and different symbolic units can construct the mechanism. From linguistic attention, it can fully be described the way, from a particular scene, how the constructions create a speech. This article discusses the theory of cognitive grammar from a fundamental point of view.

Keywords: Grammatical knowledge, cognitive ability, generative grammar, symbolic sphere, construction, model-diagram relation.

Introduction:

Around 50000 years ago, people from southwestern Africa populated the earth by migrating and creating new habitats (Berwick & Chomsky, 2011,p.19). Applying mathematical equations to find the language history, it has been proved that this was the dawn of human languages (Atkinson, 2011, p.348). With the development of language skills, human beings have been unique and different from animals. In the animal kingdom, there are no signs or proof that they had or have

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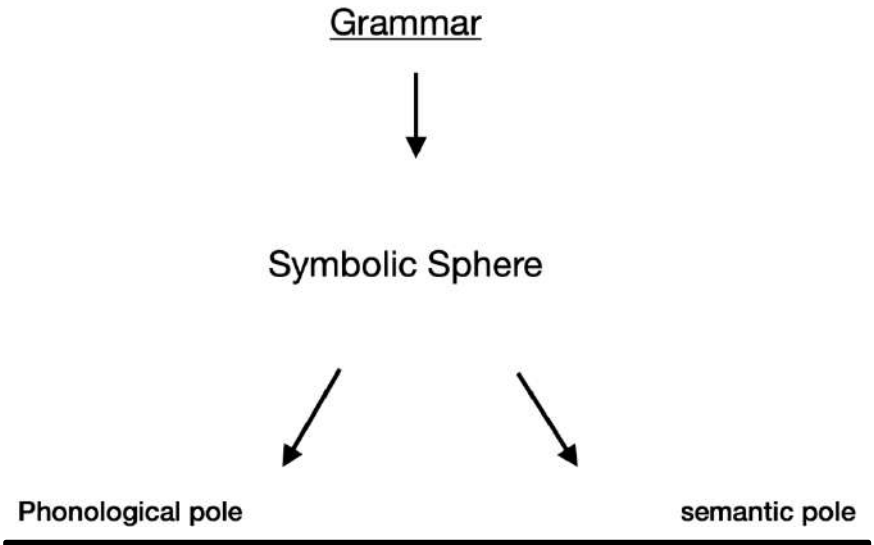
anything comparing human language to communicate among them. *Language* is a bio-scientific ability that helps show abstract ideas through gestures or sounds (Berwick & Chomsky, 2011,p. 20). Humans have been asking this question since ancient times if an invisible form can or cannot unit to a visible form. From Plato's "Theory of Form" to 17th-century French philosopher René Descartes in his "Mind/Body Dualism", they mixed the abstract and concrete substances by creating the fundamental truth. This theory's principle idea is that it can be described without the correspondence of concrete formation to the abstract one (Evan & Green, 2006, p. 44). After 1957, as often the generative grammar has been revised, or other grammars were born following it, the summary of all of them: ignoring embodied experience, language can be mathematically described as a computational system (Evan & Green, 2006, p. 45).

According to these linguists, the universe and all the events of the universe are objective realities. The only function of language is to present this objective universe. The weak point of this idea is that reality is realised only by the circles of embodied experiences. One evidence of this is that the nature of feelings of colour among animals is not different. Very animal only can see that object which its eyes and brain allow seeing (Evan & Green, 2006, p. 45). The human body experiences a particular reality, which is uniquely fixed for humans. Language works to create a shadow of embodied experience (Evan & Green, 2006, p. 45) which means the reality is not objective and language is not the description of unbiased reality. With the various explanations of this short logic, cognitive linguists had broken the theory of Descartes. Cognitive linguists are determined to describe the abstract experience with the subject of an embodied experiment. So, in the human brain, there is an independent region for language, and that region is driven by its own rules and regulation. Cognitive linguists reject this type of offering made by generative grammar. Mind and body are related experiences. So, the cognitive abilities which control the diverse activities in the human body are responsible for the origin of human languages (Evan & Green, 2006, p. 40). In the human brain, there is no independent unpleasant marginal place for language, and there are no organised chambers for phonology or morphology phraseology. Instead, the reality is ascertained as a concept, and cognitive abilities create the signs of those concepts by using the human body is called language.

The main concept of cognitive grammar:

Different linguists tried to form different frameworks about how cognitive abilities construct human languages. Their formation sometimes is the same and sometimes different. Any construction that cognitive linguists want to use in their process must follow two vital commitments. One is generalisation commitment, and the other is cognitive commitment (Evan & Green, 2006, p. 27). According to the generalisation commitment, several aspects of human language are derived from some definite and same cognitive principles (E.g. categorisation, metaphor etc.). Cognitive linguists look for this same cognitive principle, evaluate the established decisions and, if necessary, correct it. This tries to analyse how cognitive principles create human language skills. Cognitive linguists illustrated that the several events of phonetics, phonology and

phraseology etc., can be arranged in categories, and for every language, by categorisation, linguistics events can scientifically be analysed (Evan & Green, 2006, pp. 28-29). Besides categorisation, another cognitive principle; is a metaphor (Croft & Cruse, 2004, p. 194). Human uses metaphoric cognitive abilities to create the simple and complex meaning and sentences of different languages (here, "metaphor" is a terminology of cognitive linguistics, not literature). According to the second commitment, the cognitive abilities of human beings we are sure about from other branches of knowledge like psychology, biology, and artificial intelligence (AI) should



Picture 1: grammatical knowledge & symbolic sphere

be used to compose grammar, which means another parameter can not be used to create a grammar. It implies that they do not accept any ethical existence of cognitive principles unique only to languages.

While cognitive linguists wish to explain any human language, the descriptions are subdivided into two categories. Since meaning is the centre of cognitive linguistics, linguists offer cognitive semantics before the composition of grammar (Evan & Green, 2006, pp. 48-49). Cognitive economics presents the real situation and analyses the actual conceptualisation. Composing economics, they will be influenced in creating the grammar. All the grammar created or created by cognitive linguists is to be identified as the cognitive model of grammar. Head-driven Phrase Structure Grammar has been divided into two groups regarding the differences in the design of grammatical knowledge. One is cognitive grammar, and the other is construction grammar (Croft & Cruse, 2004, pp. 266, 278). In constructive grammar, according to the principle of categorising grammatical knowledge, only one mechanism is formed by the construction, and human language expression can be narrated through the constructive description.

On the other hand, under the head-driven Phrase Structure Grammar, Langacker proposed a well-furnished type of grammar, ‘cognitive grammar ’(Croft & Cruse, 2004, p. 278). This grammar explains how a sentence will be constructed, following which cognition and process are outlined. Here, for grammatical knowledge, more than one assistance from the construction mechanism is taken (Langacker, 2008, p. 183). These two branches of grammar first describe the characteristics of the grammatical knowledge of humans.

Grammatical knowledge:

The main objective of any grammarian is to describe grammatical cognition scientifically. In cognitive grammar, the central role of human language is signalling (Evan & Green, 2006, p. 476). This signalling process happens following grammatical rules. The smallest element of grammar is the symbolic unit (Evan & Green, 2006, p. 477). In this article, we are using the term ‘symbolic sphere ’allegorically. Symbolic units are unembodied. In a symbolic sphere, any idea is formed relating to two poles (Hamawand. 2011,p. 18). One is the phonological pole, and another is the semantic pole. The semantic pole presents the meaning of the phone in the phonological pole. These two poles create a symbolic sphere by getting mixed. A symbolic sphere suggests the existence of an idea of language concept in the human mind (Evan & Green, 2006, p. 477). For example, in the symbolic sphere by which the linguistic meaning of the word “book” is disclosed, in the English language, for this idea, the phonological pole will take its place, and the semantic pole will present the meaning of the book. Head-driven Phrase Structure Grammar mainly advises that the interrelation of these two poles is the internal issue of the symbolic sphere (Evan & Green, 2006, p. 476). The term ‘internal ’is significant. Any sound chronology will not have any linguistic meaning without its meaning agents. Only when the two poles become a predicament of each other the symbolic sphere is created. By the term ‘internal’, the head-driven Phrase Structure Grammar sketches the meaning as a central language element. Any sound phonology can not be a part of grammar without its meaning. So it implies that head-driven Phrase Structure Grammar supports the phonological and semantic poles.

The human mind has individual symbolic spheres for each idea in the universe. Ideas like 'book', 'constitution'', and 'ant' are linguistically expressed through the symbolic sphere. Hundreds of thousands of symbolic spheres are not disorganised in the human mind. If those spheres were not in a formed shape, formulas might be necessary. Those formulas are grammatical, which would fail to maintain linguistic cognition because those formulas are only computational. The formulas are not representatives of human cognitive ability. When any symbolic sphere comes to the human mind, it uses the human cognitive ability to be formed. Head-driven Phrase Structure Grammar describes each symbolic sphere in such a way that to form any speech, no assistance from the formula is necessary; however, it describes how those symbolic spheres use cognitive ability to form speeches.

The symbolic sphere of cognitive grammar is the unit of grammatical knowledge, meaning we have a connotation-centred cognitive inventory. Every symbolic sphere is related to other

symbolic spheres based on the sense. As a result, a massive network of the symbolic sphere is established. The founder of cognitive grammar, Ronald Langacker, mentioned that there are three types of relations among the symbolic spheres of this vast network (Evan & Green, 2006, p. 502). The first is signalling, by which the phonological pole connects itself with the semantic pole. The second one is categorisation which helps more symbolic spheres to be recognised under one category. For example, 'avocado' and 'fruit'. Through the categorisation of the symbolic sphere, 'avocado' is connected to 'fruit' because avocado is a member of the 'fruit' category. So, by categorisation, the symbolic spheres of the human mind are classified into countless sub-categories. The third one is the combination by which one member of one category or sub-category can connect with another category or sub-category. This categorisation and combination are achieved according to the cognitive ability of human beings. So, to form any speech, we are not taking any assistance from any computational and mathematical formula. Human cognitive ability creates the grammatical tendency, which helps the formation of speech. Based on the combination, the symbolic sphere of cognitive grammar can be divided into two groups; primary and composite. One primary symbolic sphere can be connected by obeying the combination relationship. We want to call this newly formed sphere a combined symbolic sphere.

So, the symbolic sphere, which does not contain the parts of the other sphere, can be defined as the primary symbolic sphere. While one sphere becomes a part of another sphere and creates a combined sphere, we call it construction. One construction can be a part of another more extensive construction; the larger one can be part of another substantial construction. Thus, more enormous constructions can be formed depending on the small constructions.

On the other hand, construction grammar does not consider the primary symbolic spheres as the construction. The symbolic sphere we are talking about is, in fact, a construction (Evan & Green, 2004, p. 258) which means there is no unit of grammar to be used to reach the level of speech. Instead, the cognitive experience of human language is expressed as construction. So, this grammar offers that the formation of the presentation of grammatical knowledge in the human mind is isolated. The cognitive experience accumulates as grammatical knowledge only by the construction, which later forms the construction as necessary. In construction grammar, the network of construction is formed instead of the symbolic sphere. Being organised in a very sophisticated way, the construction spheres create the network. Disorganised constructions are not accumulated in the human mind (Croft & Cruse, 2004, p. 262).

Schema-Instance relationship:

According to cognitive grammar, grammatical knowledge through the design and pattern appears as a network (Evan & Green, 2006, p. 504). The lexical elements we use in a speech have a specific meaning in the semantic pole against the phonological pole. The symbolic spheres of lexical elements create an open-class subsystem under the grammatical system. However, any specific meaning is impossible in the semantic pole of the symbolic sphere in the grammatical elements used in speech. They do not identify any specific sense like the free-class subsystem; instead, they play roles in establishing the relationship among the senses of the free-classed

subsystem. They are closed-class subsystems. The semantic elements of the symbolic sphere of the closed-class subsystem do not change. The plural sense always signifies the plurality. Factually, since there is no specific sphere of the closed-class subsystem, the semantic elements are schematic.

So in cognitive grammar, grammatical elements are not described based only on semantic behaviour like generative grammar. Therefore, the lexicographic difference between lexical and grammatical vocabulary in cognitive grammar is unnecessary. Instead, the clarity and unclarity of the elements of the semantic pole of the symbolic sphere of these two kinds will be recognised as a continuum. The more the elements of the semantic pole of the continuum will be specific, the more the sphere will behave as an element of the free-class subsystem (Croft & Cruse, 2004, p. 272). The magnitude of the schematic in the semantic elements will define the sphere; more schematic means it is a closed-class subsystem.

The composite spheres give a schema (Evan & Green, 2006, p. 505). In the schema, a sphere is unchanged, and this schema will only be fulfilled when any specific instance in the unchanged empty sphere is accumulated. The term 'instance' is used because the schema can dictate various objects in the universe by sampling the instance. For example, by 'avocados', 'books' etc., it is dictated that there is more than one avocado or book. The extensive design can be an element of much more extensive individual construction (Croft & Cruse, 2004, p. 263).

The principle difference between cognitive grammar and construction grammar is that cognitive grammar does not accept the construction's primary symbolic spheres. Construction grammar considers the primary symbolic spheres first, and then those spheres can become the parts of giant construction; it means the ways of cognitive grammar and construction grammar are different about whether the grammatical knowledge is accumulated as units or arranged as construction. In cognitive grammar, the unit of grammatical knowledge is the primary symbolic sphere. Following several cognitive mechanisms, these spheres are enlarged at the construction level. On the other hand, in grammar construction, experienced senses are organised as the construction, meaning grammatical knowledge is collective. Grammatical knowledge of human beings advances to create speeches by only one cognitive ability, construction.

Conclusion:

The main difference between cognitive and generative grammar is that generative grammar offers the individual cognitive ability for language. However, according to cognitive grammar, individual cognitive ability is unnecessary to describe language. Human language abilities are formed by cognitive abilities which are well recognised in psychology and other branches of knowledge. Generative grammar is based on formulas. The characteristics of sentences are determined by the laws of formulas in this grammar. Cognitive grammar rejects the formulas. According to this grammar, versatile cognitions take parts to form the construction based on the relationship of several symbolic spheres. The orator, considering the application of various elements, and accepting all the mechanisms of construction, forms a speech. Depending on this basic theory, cognitive grammar tries to make a word order of a particular language. The more the word orders are expressed, the more the descriptive adequacy of cognitive grammar increases. If the

recommended theory fails to explain any statement, grammarians propose necessary corrections and modifications.

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