



About The Universality Of Modeling

Shodiya Azizovna Ganieva

Doctor Of Philosophy In Philology, Senior Lecturer, Fergana State University, Fergana, Uzbekistan

Copyright: Original content from this work may be used under the terms of the creative commons attributes 4.0 licence.

ABSTRACT

The article discusses modeling, the process of abstraction, symbolization, the introduction of modeling into linguistics, the problems of modeling at the language level, the versatility of modeling.

KEYWORDS

Members of intuition, abstraction, abstract thinking, symbolization, modeling, epistemology, constructive world, derivative object, construct, model, scheme, substrate, linguistic model.

INTRODUCTION

A person has the ability to abstract from the world around him, whereby he can symbolize the elements of the material world that directly affect feelings. Thanks to the actions of some trainers, parrots can repeat certain “words”, dogs can answer “questions” by barking, and

bee hives can receive information about the distance and direction of nectar in “play” forms. However, in terms of the breadth of its capabilities to transmit and receive information, no living creature can compare with a person.

Even animals and birds trained in the “word” cannot go beyond imitating a certain number of words. The basic reason for this is the supreme blessing bestowed only on man - abstract thinking and the language that shapes it. Human differs from the animal world in these two qualities - the power of imagination and the power of speech. The ability to abstract symbolizes the object, symbolization is a great opportunity, unique to humans.

MAIN PART

The great French linguist E. Benvenist, thinking about this feature of man, emphasizes that the ability to symbolize exists only in man, which is the basis for the formation of the concept. He compares the game of bees and the language of “speaking” animals to man’s communicative ability, explaining that the difference between them is in the distinction between signal and symbolism. He points out that a signal is a physical phenomenon associated with another physical phenomenon in a natural or conventional sense. A person also uses symbols that he himself has established. In addition to the perception of the symbol by the senses, it is also necessary to know and interpret its meaning. Because the symbol itself has no natural connection with what it symbolizes. Man creates and understands symbols, but animals do not have such a feature. Some authors claim that trained animals know speech. In answering them, E. Benvenist states that in fact the animal is taught the signal in the word, a conditioned reflex is formed in the sequence of sounds in the word, the word cannot be interpreted as a symbol, so the animal expresses emotions through different sounds but cannot name it [1,28; 2,102]. Object symbolization is modeling.

The scientific knowledge of the Universe and the modeling of its members are of great importance in the epistemological activity of man. Therefore, in the field of hermeneutics, K. Poker’s theory of the three worlds is widespread. According to this theory, there is a world of physics, thought and ideas, and the world of ideas becomes constructive. The physical world is given to our senses, and this world is reflected in our consciousness as the mental world. The constructive world is achieved by summarizing the basic features of the intellectual world.

From an epistemological point of view, a constructive world is the highest form of cognition. The transition from the intellectual world to the constructive world allows the use of electronic computing techniques in the knowledge of the object, the use of cybernetic methods [3,170]. Therefore, in every field of science, serious attention is paid to modeling in the study of the object.

The model is derived from the French word *modele*, meaning sample. Interpreting the description of one object through another object is called a model [4,267]. The model provides a convenient opportunity to visually show important and general aspects of the object. Each model has two objects, the first is the original object and the second is the derived object. Some scientists call the resulting object a construct, model, scheme, substrate. A.F. Losev evaluates the model as an initial substrate [5,16].

The term model and modeling is a general term that originated in mathematics. “Modeling is the study of the properties of the original by replacing one object (the original) with another (model) and studying the properties of the model. The basic purpose of the

replacement is to speed up, simplify, and reduce the cost of identifying and studying the original functions. In general, the original object can be an optional natural or artificial, real (real) or imaginary system” [6,6].

The issue of language modeling is especially aggravated by the recognition of the teachings of F. de Saussure that language activity should be studied on the basis of language-speech dichotomy. This is due to the fact that modeling is created by defining the main characteristics of an object given by direct observation, and, therefore, by abstraction, that is, by turning it into an abstract object. Therefore, under any model there are two objects: the first object is a specific object that directly affects our senses, and the second object is a constructive object created by a specific subject based on the identification of important characteristics of this object. This object is a derived object created by the first object. The second object is also called cognitive by some scientists, because it is a product of thinking.

The modeling method is currently being studied by many scientists. Examples include mechanics, physics (solid), chemistry, biology, medicine, economics, and others. Linguistics also pays close attention to object modeling. E.F. Kirov emphasizes that linguistic research acquires integrity and completeness only when it is called cognitive and rises to the level of an abstract construct, which can include all aspects of intermediate state units between a foreign language and intellectual activity [7,17].

When did the concept of linguistic model emerge? Although structural linguistics was originally used in the works of Z.Z. Harris, Ch. Hockett in the early twentieth century, it became widespread only in the 60s and 70s of

the last century as a result of the emergence of mathematical linguistics and the introduction of cybernetic methods into linguistics.

This concept represents the original device that directly affects our sensory organs in the speech process - an artificial device created by a linguist on the basis of important features of speech units. Such devices also have materiality and can be represented by mathematical symbols, literal abbreviations, and various schemes.

Linguistic models and modeling methods have been widely used in Uzbek linguistics since the 70s and 80s of the last century. In particular, A. Nurmanov raised the problem of modeling the syntactic units of the Uzbek language [8]. He argues that the starting point for a systematic study of syntax should be the syntactic model. The generalized block diagram, implemented through real sentences, is a syntactic model. Two principles of defining syntactic models are emphasized: the first principle is to define a minimum structure containing units sufficient to be a predicative unit; the second principle is to identify the structural elements that serve to ensure not only grammatical integrity but also semantic completeness..

In both cases, a syntactic model is defined by excluding secondary, optional units from the concrete sentences, leaving the units that speak the sentence [8,11-12].

The issues of modeling at the syntactic level were also raised in the studies of R. Sayfullaeva, M. Kurbanova. These authors prefer to use the term “template” instead of the term “model”. M. Kurbanova puts on the agenda simple modeling, and R. Sayfullaeva - modeling complex sentences. According to Professor D. Lutfullaeva, a linguistic pattern (model) is an ordered sequence of certain

linguistic elements, which, through certain symbolic symbols, reflects different levels of abstraction [9,6].

D. Nabieva is one of the researchers of Uzbek linguistics, who pays special attention to the issue of linguistic modeling. According to the scientist, the linguistic model is characterized by the fact that it is a constructive scheme that exists in the human mind as an opportunity, and it is filled directly with specific lexical units in the speech process. He also thinks about the modeling of linguistic units, noting that modeling is based on the stable relationships of the elements in these characters, and therefore the separation of stable or transient (unstable) signs of the relationships between the elements in the whole is important for modeling [10,10-11].

Since objects of various levels of language are the object of linguistic research, this means that they all obey the language-speech dichotomy and form an invariant-variant contradiction.

An invariant as an abstract unit is created by simplifying specific units that appear as variants in the process of direct speech, by getting rid of secondary, additional symbols [11,16]. Invariants are not a unit on a separate line separated from the options, but a unit that repeats in each of the options, defining their essence. Invariants are represented by options, and options are represented by invariants.

CONCLUSION

At any level of the language, invariants are determined by models. While the opposition of the invariant variant is applicable to all levels of the language, linguistic modeling and modeling are also universal phenomena characteristic of all levels of the language.

REFERENCES

1. Benveniste E. General linguistics. Moscow: 1974.
2. Nurmonov A. Emil Benvenistning linguistic concepts // Uzbek language and literature. 2012, issue 2.- p.102-106.
3. A.I. Novikov Semantics of the text and its formalization. Moscow: Nauka, 1983.
4. Philosophical Dictionary. Moscow: Publishing house polit. Liters, 1991.
5. Losev A.F. An introduction to the general theory of language models. Moscow: Nauka, 1968.
6. Kamilov M.M., Ergasheva A.K. Mathematical modeling, Tashkent: 2008.
7. Kirov E.F. Theoretical problems of language modeling. KazSU Publishing House, 1989.
8. Nurmonov A.N. Problems of a systematic study of the syntax of the Uzbek language. Tashkent: Fan, 1982.
9. Lutfullaeva D.E. Problems of semantic-syntactic modeling of speech. Tashkent: Fan, 2005.
10. Nabieva D. Manifestation of general-specific dialectic at different levels of the Uzbek language. Tashkent: Sharq, 2005.
11. Ganieva Sh. Structural study of uzbek phraseology. Tashkent, "Fan", 2013.