



VIEWS OF MATHEMATICAL MODELS IN THE DISCOVERY OF COMPUTER LINGUISTICS

Boqiyeva Marjona Shuhratovna

English teacher of Bukhara Institute of Engineering and Technology Academic Lyceum

Annotation: This article provides an insight into the specific trends and models of computer linguistics that are emerging at a time when information technology is evolving. Mathematical models can also be considered in accordance with modern requirements. The origins of mathematical linguistics can be traced back to computer linguistics, and the article discusses this.

Keywords: computer linguistics, virtual stands, approach, machine translation, mathematical model, natural language elements

Nowadays, Information is the development of communication technologies modern technologies to the teaching process of the social sphere at the stage its application is becoming one of the requirements of the time. Including traditional it is natural to improve and enrich education through computerized teaching systems developing new approaches and methodological tools for specialists is raising a number of issues such as exit.

Development of distance education system in Uzbekistan, to our people not only providing quality education, but also our country it also allows to take its place in the international market of educational services.

In a number of directions on the organization and development of computer training things are being done. 2002 of the first President of the Republic of Uzbekistan

Adopted on May 30 - Further development of computerization and on measures to introduce information and communication technologies improvement of the field of personnel training, the potential of our country in the decision civil society based on democratic state and market economy was defined as one of the important conditions of construction.

Formation of knowledge base in computer systems of teaching systems working with the principles of automated learning systems service to the higher level, that is, to the level of intellectual education systems does. It is very important to share the computer system with linguistics.

It is known that the science of linguistics was formed as an independent science in the 19th century. From this since then it has been developing in different aspects and directions. Including, such disciplines as sociolinguistics (sociology and linguistics),

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psycholinguistics (psychology and linguistics), ethnolinguistics (ethnography and linguistics), neurolinguistics (neurology and linguistics), mathematical linguistics and Computer Linguistics can be included. This is a few in the system of sciences it should be evaluated as mutual cooperation and integration of sciences.

In the 20th century "machine translation", "machine linguistics" in linguistics since the middle the terms began to be used._ In this way, the ideas of machine translation are whole gained great importance in the development of theoretical and practical linguistics in the world.

In parallel with this direction, the theory of formal grammar was created, language and attention was paid to creating a model of its particular aspects. These aspects of language was developed in the field of mathematical linguistics, which, in turn, is a computer became the foundation for the emergence of the science of linguistics. So on that basis a new direction of linguistics - computer linguistics and one of linguistics a number of theoretical and practical directions have emerged.

Mathematical linguistics is the mathematical development of natural languages, especially artificial ones is a science dealing with the creation of algorithms for languages. Mathematical linguistics

The most important issues are:

- development of axiomatic theory of language;
- creating a formal grammar;
- development of mathematical models of languages.

The main goal of mathematical linguistics is the mathematics of natural languages is to develop a model. To achieve this goal, the science has the following tasks:

- development of formal models of natural and artificial languages;
- assessment of linguistic phenomena in mathematical parameters;
- analysis of language phenomena using mathematical methods.

Computational linguistics is a logical continuation of mathematical linguistics is the most important part of applied linguistics and computational linguistics in the USA in 1954 at Georgetown University in the field of machine translation during the first experiment, it began to take shape as a direction and in 1960

By 2010, it was operating as an independent science. Computational Linguistics in English is the basis of the word "computational linguistics". This science until the 80s of the XX century variously called computational linguistics, mathematical linguistics, called quantitative linguistics.

The main goal of this science is the computer to solve linguistic problems software development, human-machine (computer) communication optimization is natural language processing. Natural language processing computer

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Linguistics includes computer analysis and synthesis of natural languages. In this analysis of natural language on the computer using morphological, syntactic and semantic analysis

It is used in relation to comprehension, while synthesis is the grammar of the text on the computer means formation and generation.

The main areas of computational linguistics include:

- development of an automatic training system;
- knowledge testing;
- automatic editing of texts in various ways;
- automatic morphological, syntactic and semantic analysis of texts creation of supply systems;
- development of programs for machine translation;
- statistical analysis of dictionaries and computer text;

Computational linguistics has a practical nature and is related to language focuses on the practical aspect of problems. And in computational linguistics naturally, it relies more on artificial languages (programming languages, algorithmic languages) the available capabilities of languages are limited, in which natural language processing, adapted to the computer. Do not forget the term model for this necessary. The model allows us to learn, understand, interpret and perfect the system is a tool that can help in the field. A model is an object full and clear or can express some features.

Physics given in mathematical modeling mathematical expressions of processes are modeled. The mathematical model is external of some class of phenomena of the world represented by mathematical symbols is an approximate description. Mathematical model knowledge of the external world, as well as in advance is a powerful way of telling and directing. Analysis of the mathematical model makes it possible to get into the essence of the phenomenon being studied.

The study of phenomena using a mathematical model is carried out in four stages. The first stage is the laws connecting the main objects of the model to express The second step is to check the mathematical problems in the model

The third stage is the accepted practice criteria of the model determining satisfaction.

In other words, the object obtained with the theoretical results obtained from the model to determine whether the observation results are appropriate. fourth step of the model by gathering information about the phenomenon under study conducting the next analysis and its development and clarification.

Thus, the main content of modeling is the initial object on the basis of learning, through experience and theoretical analysis of the model, object of the results comparison with information about, correction (improvement) of the model and that's it etc.





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