EUROPEAN INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY RESEARCH AND MANAGEMENT STUDIES

VOLUME03 ISSUE01
DOI: https://doi.org/10.55640/eijmrms-03-01-08 Pages: 47-52

BRIEF REVIEWS OF COMPUTER LINGUISTICS RESEARCH ABROAD

Kurbanova Farogat Subkhanovna
Teacher Of The Department Of Uzbek Linguistics Uzbek Language And Literature University Named After Alisher Navoi, Uzbekistan

ABOUT ARTICLE

Key words: Computer linguistics, "Artificial Intelligence", methodological error, psychological-cybernetic foundations;

Received: 08.01.2023
Accepted: 13.01.2023
Published: 18.01.2023

Abstract: Language is a great gift given only to man. Therefore, the study of linguistic phenomena is fundamentally different from the study of other social phenomena. All natural and social phenomena have a systematic structure and self-organization. It has already been recognized that language is also a systematic phenomenon. The attention of linguists is focused on a number of issues, such as how this system is organized, what types of units are in its structure, the interaction of these units, the structures formed on the basis of these relationships, the general system and its place in the hierarchical structure. Customization of such a systemized language to the computer saves users time and saves them from the tedious work of searching through many dictionaries. All the researches, tireless and painstaking researches of scientists serve only one thing, that is, human interests.

INTRODUCTION

The scope of research on computational linguistics abroad is very wide. Those in the US, in particular, are notable for their consistency and breadth of issues covered. In addition to the published thematic collections, the journal "Computational Linguistics" is also published. The Association for Computational Linguistics exists in the United States, and this association carries out many organizational and scientific activities related to computational linguistics. COLING conference is held in USA every two years. 10 US universities have departments of computational linguistics. Problematic issues of computer linguistics are being considered and solved in these faculties by their specialists. Also, the magazine "Artificial Intelligence" (Artificial Intelligence) is published in the Netherlands. This

magazine also encourages people to solve computer problems and brainstorm on newly created programs. Important research on computer linguistics has also been carried out in CIS member countries. Research in Russian computer linguistics is particularly noteworthy. The following directions can be highlighted in it: 1. Machine translation (MT). 2. Automatic editing (AT). 3. Computerization of the language teaching process (automatic language teaching - ATO). 4. Statistical studies (ST). Y. N. Marchuk is considered one of the scientists who founded today's Russian computer linguistics by developing translation modeling methods and ways to automate it. Also, many Russian, Ukrainian, and Moldovan scientists were engaged in the issues of machine translation, and their research occupies an important place in computer linguistics. In particular, it should be noted that many candidacy and doctoral theses were supported in this field. A deeper study of the field will ensure the opening of unexplored edges.

Especially in the 60s and 80s of the last century, a lot of scientific researches focused on the development of the features of machine translation took place. As noted, these studies became the basis for the creation of a database on the Russian language in global computer networks, and as a result of this, the creation of programs that automatically translate Russian texts into other languages. Creating such a database in the Uzbek language is the most urgent task today.

Another area of computer linguistics in Russian linguistics is automatic text editing. R.R. Kotov, V.Y. Berzon, V.G. Britvin, I.A. Melchuk, L.I. Belyaeva, V.A. Chijakovsky, G.G. Belonogov, I.S. Duganova, A.B. Kuznetsov can be included among the scientists who conducted scientific research in this direction. The main service of these scientists is that they created linguistic support for automatic editing programs. As a result, programs for editing Russian texts on computers have been developed.

These programs are available on all computers today. That is, a red line is drawn under the wrongly written word, and the line disappears after the word is written correctly. It seems that this program is mainly intended for spell checking, not for detecting grammatical errors.

It should be noted that in order to develop such programs, it is necessary to create a linguistic resource that takes into account not only the phonetic, semantic, and morphological features of the language units, but also the syntactic and valence features. In Russian linguistics, consistent research has also been conducted in the direction of automatic language learning. They are aimed at developing the psychological-cybernetic, semiotic, linguostatistical, engineering-linguistic and linguodidactic bases of optimizing language teaching in higher and secondary schools. In particular, G.G. Piotrovsky's training manual includes teaching with the help of EHM, i.e. solving linguo-didactic tasks with the help of a

computer, optimizing the language teaching process, preparing (selection) speech materials for the teacher linguistic automaton (O'LA). issues are explored. As a result of research, linguistic support for many teaching linguistic automata has been created, and these programs serve to optimize the process of teaching the Russian language.

The thesaurus system has been effectively studied in several countries. When we analyze it based on Russian linguists, one of them, we can see the following, that is, the thesaurus in Russian linguistics includes the following:

1. Relation to morphology and syntax.

2. Pronunciation.

3. Composition of meanings:

A) the original meaning of the word

B) synonym

C) antonym

D) hyperonym

E) hyponym

4. Relative words.

5. Etymology of words.

6. Use in phraseology.

7. Use in other languages.

For example, if we take the term thesaurus itself:

1. In morphology and syntax

Root thesaurus - of thesaurus, to thesaurus, from thesaurus, to thesaurus

Plural - thesauri

The subject belongs to the noun group and is classified.

2. Pronunciation

Singular [tʲɪ'zaʊrʊs], plural [tʲɪ'zaʊrʊs]

3. Meaning structure

A thesaurus is a combination of all the meanings of a word and the relationship between words related to semantics (word meaning).

At present, texts related to semantics and linguistics have not been sufficiently analyzed.

A) synonyms - Ideographic dictionary

B) Antonym

C) Hyperonym Dictionary

D) Hyponym

E) Relative words

F) Closest kinship words

4. Etymology

Derived from Greek (thēsaurós), meaning "precious thing, inexhaustible treasure"

5. It is used in phraseology or in the form of a stable compound

Linguistics Thesaurus

Thesaurus of Statics

Logical thesaurus

6. Use in other languages

In Great Britain: thesaurus

In Germany: Thesaurus

In the Netherlands: thesaurus, in Bulgaria: thesaurus

In Portugal: tesauro, in France: thésaurus, thesaurus

In Czech: tesaurus, in Spain: tesauro, tesoro

Italian: thesaurus, Malaysian: tesēāṟas

Broadly speaking, informatics represents the unity of various branches of science and technology related to information processing in all spheres of human activity, mainly with the help of computers and telecommunications. Computers create great convenience and ease in human activities.

Thesaurus is divided into several levels. The problem of ranking thesauruses is not new and has attracted the attention of a number of linguists of our country and abroad (V.V. Morkovkin, L.P. Stupin, K. Marello, etc.) for several years. As a result of research in this field, alternative levels of the indicated lexicographic works have been created. However, in our opinion, authors do not always use the same methods when choosing thesaurus types, sometimes not taking into account the principle of general criteria of ranking, thus its logic is violated. In addition, the presented classifications are not sufficiently systematic and do not reflect all types of thesauruses.

Nevertheless, the previous developments of this issue provide positive, significant experiences, and we are currently trying to create our own vocabulary-thesaurus ranking based on them.

Grading is carried out mainly on the basis of materials of modern thesauri of the English language, taking into account re-emerging lexicographical derivatives expressed in printed and electronic versions. This rating is based on the following criteria:

The type of semantic connections between vocabulary units.

Vocabulary size.

Generalization (maintenance) of vocabulary.

Developing the value of lexemes.

Grammatical-stylistic qualification of lexemes.

Demonstration of lexeme activity.

Number of languages provided.

A type of semiotic tools used to systematize lexemes.

The ranking is based on the ranking created earlier by O.M. Karpova and I. Burkhanov, as well as personal results obtained from the views of more than 30 dictionary-thesauruses researched by the British. The terminology used in grading was included in the lexicographic apparatus by V.V. Morkovin, Y.N. Karaulov, I. Burkhanov, K. Marello. Grading criteria and expressed by O.M. Karpovalar; the definitions of the criteria belong to L.P. Stupin.

REFERENCES

1. Nurmonov A., Yoldoshev B. Linguistics and natural sciences. –
2. Tashkent: Teacher, 2001.
3. Polatov A., Muhamedova S. Computational Linguistics (study
4. manual). -Tashkent, 2009.
5. Pulatov A.K. Text lecture on mathematics and computer linguistics (electronic version).
6. Polatov A. Computational Linguistics. -Tashkent, Academy, 2011.
7. Rahimov A. Fundamentals of Computational Linguistics. Tashkent, Akademnashr, 2011.