

## THE NEED TO CREATE A MORPHOLOGICAL DICTIONARY OF UZBEK LANGUAGE

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### ANNOTATION

The article describes in detail the formation of a morphological dictionary of the Uzbek language. Compares similarities and differences with morphological dictionaries and grammar dictionaries. World experience, theoretical views and research in the Uzbek language are studied. The work on the first morphological dictionaries is also covered. Suggestions for future work on morphological dictionaries have been developed.

**Keywords:** grammar dictionary, morphological dictionary, grammatical form, automatic morphological analysis, numerical indexes.

### INTRODUCTION

Each language has its own complex system. The constant study, preservation, enrichment and effective use of language by its owners will allow it to survive and gain a place among the world's languages. The transition of today's world civilization to the virtual world, the unprecedented globalization of this world, will inevitably attract the spiritual treasures of many nations. Indeed, "in the information age, any language that claims to develop must become the language of artificial intelligence. The global prestige of our native language does not increase only through propaganda. It is also wrong to talk about the development of language that is not part of artificial intelligence." [21] Therefore, the attention to the state language in our country has become one of the priorities. To further enhance the status of our native language, to achieve the widespread use of the Uzbek language in the modern information and communication system, to deepen the study of our national and cultural heritage, to increase electronic resources in mother tongue education, as well as education from these resources Achieving unlimited access to the recipients, the collection of cultural heritage materials that serve the national-spiritual education on one platform has become an urgent task. The definition of language policy and a series of measures for the development of languages in recent years shows how serious this issue is [1, 2]. A more thorough study of the grammar of the Uzbek language, the study of morphological forms, the computerization of the results in the form of a dictionary will serve to fulfill the above tasks.

### ANALYSIS OF THE RELEVANT LITERATURE

There is also the practice of creating a grammatical dictionary in world linguistics, and in practice it has been observed that grammatical dictionaries of several languages have been created. Many grammatical dictionaries have been created in each of the languages of many developed countries. In particular, English and Russian are leaders in this regard. For example, dozens of grammatical dictionaries [6, 7, 8, 9, 10, 11, 12, 14, 15, 16, 17, 18] have been prepared

in the Russian language alone, and this process is still ongoing. A dictionary of grammatical forms of separate verbs has also been created in Russian. For example, A.P. Okuneva compiled a dictionary of 4,000 verbs in Russian with 60,000 verb forms [9]. VD Tolmacheva published a dictionary of verb forms [18]. It is also possible to continue the list of dictionaries created in different variants of verb forms. All of the above dictionaries are in electronic form, and various computer software has been developed for use. These dictionaries serve as a database for electronic spelling, translation programs, automatic morphological analysis systems, and corpus.

Although there are several articles on morphological dictionaries in Uzbek, there is no separate source for research. In recent years, as a result of attempts to create a morphological dictionary as a practical work, Sh. Khamroyeva, O. Kholiyorov and G. Abdualimova for the first time compiled a dictionary of verb forms of the Uzbek language [19].

The purpose of this dictionary of morphological forms is to determine the grammatical forms of Uzbek verb forms in the Uzbek language and all their positions, to show the grammatical structure of each form, the model of grammatical morphemes. It was noted that such a morphological dictionary will serve not only as a database of the educational corps, but also as a key linguistic support in the development of the morphological tagging program, morphological analyzer of the Uzbek national language corps.

Statistical research shows that there are about 4,000 verbs in the Uzbek literary language. Due to the large number of morphological forms of one verb in Uzbek, unlike grammatical dictionaries in other languages, only one verb is selected in this dictionary. The forms of this one verb reveal the richness of the possibilities of the Uzbek language, adequately reflect the landscape, and also serve as a basis for the forms of other verbs.

## RESEARCH METHODS

Methods of classification, description, comparison, statistical analysis were used to cover the research topic.

## ANALYSIS AND DISCUSSION OF RESULTS

The lack of large grammatical dictionaries in Uzbek is due to the complexity of the morphological system of the Uzbek language and the large number of morphological forms. Traditional carding does not take the life of one person to collect and organize such evidence. The system of morphological forms of words in the Uzbek language is complex and numerous. Verb forms are especially important. That is why A.Polatov writes in his book: "The grammar of the Uzbek language (in the above-mentioned system) has not been fully studied, that is, it has not been systematized, it has not been formalized. For example, verbs, nouns, and other categories of verbs and sentence constructions are not fully listed (for example, the form of a single verb in Uzbek exceeds about 100,000, while in English there are about 150 forms. there is only). Information about them belongs to A.Pulatov, T.Muminova, I.Polatova "Secular Uzbek language. Verb forms in Uzbek and their forms in Russian and English" (Tashkent: University, 2003)" [13]. It seems that the morphological forms of the Uzbek language are completely

different from the grammatical forms of other languages, with a very rich potential and a variety of combinations.

A grammar dictionary is a collection of lexemes in a given language, covering all their grammatical forms. AA Zaliznyak's grammatical dictionary [6] not only shows the grammatical changes of modern Russian words (noun, adjective, number, rhyme, verb tenses), but also serves as a reverse dictionary. In addition to the list of words in the dictionary, there is an introductory part, which contains a large amount of theoretical and descriptive information about all the variants of variation [22]. In the next supplement, even the peculiarities of the variety of famous horses were reflected. Although the dictionary was published in 1977, it has been reprinted several times with additions and corrections. The dictionary section has been completed, but for the convenience of the user, the theoretical section has been preserved on the same pages. There are paper and electronic versions of the dictionary, the electronic version is used in the field of natural language processing: spelling, machine translation, automatic abstracting, corpus building.

AA Zaliznyak's Grammar Dictionary is a fundamental study of morphology. Each word is accompanied by information about its formation, stress, rod, vid, transitive / intransitive (for verbs), the formation of the indivisible form [20]. The author himself describes the dictionary as follows: "The grammatical dictionary shows the grammatical changes of modern Russian words. The dictionary contains 100,000 words in reverse / inversion order: the word is in the order of the letters at the end of the word, not the beginning. Each word is marked with an index / index that refers to the grammatical information: through this index, the user sorts and sorts the word that interests him, according to the rules of sorting. Changes in the Russian language from the first edition of the dictionary to the present day have been taken into account and supplemented. Also, 8,000 names are included with a grammatical description "[20].

A morpholexicon is a database (MB) that contains the vocabulary of a particular language, with information about its belonging to the lexeme, its grammatical features, and adapted to the process of natural language processing. Such a MB is available in electronic form and serves as a linguistic support for various means of processing natural language (automatic translation, linguistic corpus, morphological, semantic, graphematic analyzer).

Based on our observations, we can say that the morphological dictionary contains indicators of changes in the word belonging to a category, belonging to a grammatical category, the variation of the stem and its relation: these characters serve as a search filter does; returns a clear, relevant, informative result to the query. A grammar dictionary is used to describe the grammar of a particular language; its main function is not automatic processing of natural language. The morphological dictionary is characterized by the fact that it fully covers the vocabulary of the language, exists as a database, and can be a linguistic support of the means of processing natural language. A morphological dictionary of language and a morphological lexicon are complementary databases.

A.M.Galiyeva, A.R.Gatiatullin, studying the importance of the morphological category of the verb in the construction of the model of Turkish word-suffixes [5], describes the possibility of performing morphological analysis using the base. If you enter a word in one of the specified Turkic languages in the data entry window of the software, the result window will show the

sequence of morphemes and morphological categories according to the morpheme structure of the word. It may seem superfluous to specify morphemes and morphological categories in a given word. There are certain reasons for this: in Turkic languages, the same morpheme (grammatical form) can represent several categories [5]. For example, in Uzbek, -gan, -ib, -di represent different grammatical categories depending on their position.

### CONCLUSIONS AND SUGGESTIONS

The purpose of compiling the morphological dictionary of the Uzbek language should be to determine the grammatical forms of the Uzbek language and all their positions, the grammatical structure of each form, the model of grammatical morphemes.

It is difficult to create a common grammar dictionary in Uzbek at the same time. This is because of the different combinations of the above forms and the large number of quantities that prevent this. Therefore, we consider it expedient to compile a dictionary of morphological forms of each word, first of all, the group of verbs that receive the most grammatical forms. Later, this dictionary became the basis for compiling a general grammatical dictionary of the Uzbek language.

Creating a morphological dictionary is important with the following results:

- Demonstrates the rich grammatical potential of the Uzbek language;
- is a source for tracking the positions that form morphological forms;
- allows to study the morpheme structure of the word;
- serves as a source for developing a model of the morpheme structure of the word;
- serves as a linguistic base for educational corps, national corps, automatic morphological analyzers, translation, automatic spelling checkers.

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