

**THEORETICAL AND PRACTICAL BASICS OF CREATING MODERN
ELECTRONIC DICTIONARIES**

Sevinch Alievna Sadikova

PhD in philology, senior teacher

At the department foreign language and literature

Of the faculty of Foreign philology of

National university of Uzbekistan

<https://doi.org/10.5281/zenodo.10216030>

It is known that language is not only a means of communication, but also a cultural factor in the existence, development of each nation, human society as a whole, since language is a natural condition for the preservation and transmission of what is mined by mankind in the process of verbal knowledge of objective reality, a vital, as well as spiritual experience is expressed in the global picture of the world created by each nation.

This can be confirmed by the words of the German philosopher Wilhelm von Humboldt: "the existence of each nation is related to its language. A nation that does not survive cannot exist as a native language, a nation". From this logic, it can be noted that language is an important condition for the existence and development of each nation.

Language as a means of communication and as a reflection of social culture has basic levels in the form of words and grammars. The set of words that are usually located in alphabetical order, with information about the meanings of these words, their use, origin, translation into another language or concepts and topics, we are traditionally called dictionaries. The branch of linguistics that deals with the compilation of dictionaries and their study, as well as the practice of direct compilation, is called lexicography.

The development of lexicography as a science is primarily due to the need for communication between countries, cultures and civilizations to establish economic, commercial, cultural and diplomatic relations. Such a need, in turn, served as a prerequisite for the study of foreign languages, which is not possible without the help of appropriate dictionaries. The demand for dictionaries arises along with the need for Intercultural Communication, which has a centuries-old history. Consequently, the practice of compiling dictionaries dates back to ancient times and continues to this day, improving with the development of Information Technology. Accordingly, it expands, and the scale, the methods of compiling dictionaries that do not lose their relevance in various areas of modern society's life, are optimized. In this sense, dictionaries can be seen as a



large-scale expression of the material and spiritual side of life in particular culture and is a way of transferring named values to subsequent generations.

It remains unclear who exactly and when the first dictionary was compiled in history. According to Aristophanes of Byzantium, curator of the Museum of Alexandria (in Ancient Egypt), a close similarity of modern dictionaries was written in the 2nd century BC, which contained incomprehensible words related to the passive vocabulary of the Greek language.

An important stage in the development of lexicography dates back to the 19th century, when he prepared to publish the "Deutsches Worterbuch" (German dictionary) in 16 volumes of the Grimm Brothers (Jakob, Wilhelm), the publication of which was only completed in 1961. This volume dictionary Brothers Grimm served as the basis for later works and publications in this direction, followed by several new dictionaries in Europe. The dictionary of the Brothers Grimm analyzes the initial, etymological meanings of words, their roots, their various forms in ancient written monuments, as well as the features of their use in other languages and dialects.

It should be noted that based on the example of the Brothers Grimm dictionary, the English Dictionary "Oxford English Dictionary" was compiled in 13 volumes published in 1933[1]. The first dictionary of the Turkic world is considered to be the "Divanu-lugat-it turk" (Dictionary of Turkic words) of the Mahmud Kashgari dictionary, which laid the foundation for a new stage in the development of the lexicography of Turkic languages.

The 20th century is called the age of technology, the achievements of scientific and technical progress have had a significant impact on all spheres of social life. Under this influence also appeared linguistics, in particular lexicographies that solve modern theoretical and practical problems. Theoretical rules for classifying dictionaries can be cited as a vivid illustration of this trend. For example, nadir ilkhan suggests the following, taking into account the above-mentioned modern trends in the development of lexicography:

criteria for classifying dictionaries: by developed materials; by dictionary types (book, computer); by forms of expression.

Based on the above criteria, Nadir Ilkhan classifies dictionaries as follows:

1. In terms of materials developed:
 - words belonging to the literary norm;
 - words used in oral speech.
2. By types of dictionaries (book, computer):
 - Book View;



- Electronic View.

3. By forms of expression:

- poetic form;
- prose form.

Electronic dictionaries have become an essential tool for language learners and professionals. They offer a convenient and efficient way to access word meanings, synonyms, antonyms, and other language-related information. The creation of modern electronic dictionaries involves both theoretical and practical aspects, which are discussed below.

Theoretical basics:

1. Corpus selection: A corpus is a collection of written or spoken texts that are used to extract linguistic data. The selection of an appropriate corpus is crucial for the accuracy of the electronic dictionary. The corpus should be representative of the language being studied and should cover a wide range of genres.
2. Data extraction: Once the corpus is selected, the next step is to extract the relevant linguistic data. This includes words, their meanings, synonyms, antonyms, examples of usage, and other language-related information.
3. Data processing: The extracted data needs to be processed to remove duplicates, errors, and inconsistencies. This involves using various linguistic tools such as part-of-speech tagging, stemming, and lemmatization.
4. Database creation: The processed data is then stored in a database that can be accessed by the electronic dictionary software. The database should be designed to allow for efficient searching and retrieval of information.

Practical basics:

1. User interface design: The user interface of the electronic dictionary should be intuitive and easy to use. It should provide quick access to the search function and allow users to navigate the results easily.
2. Software development: The software development process involves programming the electronic dictionary software using appropriate programming languages such as Java or Python. The software should be designed to run on various platforms such as desktops, laptops, tablets, and smartphones.
3. Testing and validation: The electronic dictionary software should be tested thoroughly to ensure that it functions correctly and provides accurate information. Validation involves comparing the results of the electronic dictionary with those of a human expert.





Overall, creating modern electronic dictionaries requires a combination of theoretical and practical skills. It involves selecting an appropriate corpus, extracting and processing linguistic data, designing a user-friendly interface, developing software, and testing and validating the results. The process requires a team of experts, including linguists, database specialists, software developers, and testers.

References:

1. Kudashev I. S. designing translation dictionaries of special dictionaries. Helsinki, 2007.
2. Linguistic and Computer Studios: Prose of the Ukrainian Movnoinformatic Foundation of the National Academy of Sciences of Ukraine: 3-jild. the lexicography of Tlumachna. Book 1. Kiev, 2018.
3. Dubichinsky V.V. Lexicography: navch.- method. postib. Harkiv: NTU "KhPI", 2012.
4. Belyaeva L.N. Automated lexicography and the potential of applied linguistics // Izvestiya A. I. RSPU named after Herzen. 2010.
5. Tabakova V.D., Kovyazina M.A. Functional model of translated special vocabulary. 2006.
6. Sivakova N.A. Lexicographic description of English and Russian phytonyms in an electronic dictionary: Abstract. Dissertation Ph.D. Tyumen, 2004.
7. Karpilovka E.A. Introduction to Applied Linguistics: Computational Linguistics: textbook. Donetsk, 2006.

