

Article

Analysis of The Use of Terms of Environmental Analysis in Uzbek, Russian and English and Some Translation Problems

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Abstract: This article discusses issues related to the use of environmental terms in different languages, their lexically and methodologically correct translation. Errors and omissions are indicated in green terminology. In this case, recommendations are given based on the example of research conducted by experts in this field. Environmental science has been developing around the world for more than a hundred years. Scientists from different countries have made a significant contribution to this process, so environmental terminology has a national linguistic coloring. The intensive development of this science in recent decades has led to the fact that today problems of ecology and the environment occupy an important place in the life of society. Modern ecologists are faced with the need to translate a large amount of English-language environmental literature. However, in the process of translating a special text rich in terms, quite a lot of difficulties arise that lead to changes and violations of the meaning of the original text. Therefore, in order to effectively eliminate the problem, a specialist needs to have accurate and specialized information and knowledge in the field of ecology.

Keywords: Environmental Protection, Foresters, Sustainable Forest Users, Semantics, Stylistics, Water Stress, Biology, Chemistry, Geology, Simple and Complex Words, Foreign Terms, Classifications, Generalization, Specification, Modulation

1. Introduction

At the present stage of its development, comparative studies of languages pursue the goal of revealing systemic relationships in the functioning of various processes and patterns, individual phenomena in various languages in general and in each of them separately. In this aspect, one of the most significant problems of modern comparative study of languages is the determination of systemic relations at the lexical level.

Establishing systemic relationships in vocabulary and their comprehensive study aims to establish lexical-semantic groupings and associations in the vocabulary system, determine their component composition, analyze internal functional-semantic relationships and structural-grammatical relationships. One of such associations in the system of vocabulary of a language is terminology, which exhibits the most strict systemic relationships, both in the aspect of internal formation and in the manifestation of external connections in the general system of the language. The environmental terminology we have chosen as a monographic study in this work also has similar linguistic properties in the general system of terminology.

The science of environmental protection has been evolving for many years. In the Action Strategy of the President of the Republic of Uzbekistan in five priority areas of

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development of the Republic of Uzbekistan for 2017-2021, special attention was paid to the environment [1]. The constantly growing number of problems associated with environmental pollution increases the interest of Uzbek scientists in ecology. It is no coincidence that the Committee for Ecology and Environmental Protection and the Forestry Committee have been created in our country. Currently, scientists in the field are struggling to master environmental terms coming from abroad.

This research will, to a certain extent, contribute to the implementation of the tasks outlined in a number of legal acts, such as Decree of the President of the Republic of Uzbekistan DP-4797 "On the establishment of the Tashkent State University of Uzbek Language and Literature named after Alisher Navoi" dated May 13, 2016, The Law of the Republic of Uzbekistan LRU-363 "On environmental control" dated December 27, 2013, Resolution of the Cabinet of Ministers of the Republic of Uzbekistan "On approval of standard provisions for the implementation of public environmental control" dated October 8, 2015 No. 287 and in other documents related to this activity[2].

The relevance of this work also comes from the theoretical and practical significance of the study of the problems of terminology, which has currently received intensive development in the era of the scientific and technological revolution. An in-depth study of the terminology of various branches of science is the most important task in connection with the general focus of terminological research on the linguistic analysis of the factors in the formation and development of the terminology of certain scientific fields.

Ecological terminology is a set of terms of a specific scientific discipline, and studying it as a lexical-semantic system in a comparative aspect in English and Uzbek languages is of certain scientific interest.

The study of the term system of ecology of the Uzbek language is relevant especially today, when after the acquisition of real independence by Uzbekistan, the Uzbek language with its status as the state language is entrusted with enormous social responsibility both within the country and in the international arena. The development, based on the comparative analysis of terms in the Uzbek and English languages, can also contribute to the practice of translating specialized literature in this field.

The relevance of environmental problems and the need to solve them for the survival of mankind in the modern world has given rise to large-scale theoretical research and the formation of practical branches of human activity in this area. Before our eyes, the birth and development of a new field of knowledge - ecology - is taking place, and various disciplines are becoming greener. The term ecology and its derivatives are very firmly integrated into our lives - ecology becomes for all humanity not only a science, but also a way of thinking, behavior, and everyday reality. It becomes one of the sides of humanism, including spirituality, understanding of the unity of man with nature, high culture, and intelligence. Everything taken together determines the relevance of the proposed research, which is carried out on the basis of environmental terminology.

The relevance of this study is also determined by the need to develop and streamline environmental terminology, since unified terminology not only allows us to summarize and linguistically reflect the system of certain concepts, but also, having predictive properties, serves as a tool for the further development of environmental science.

Scientific research on the issue of structural, semantic, functional-distributive, cognitive-conceptual analysis of environmental terms is carried out by leading scientific centers and higher educational institutions of the world, in particular Oxford University (UK), Cambridge University (UK), Humboldt Universitat (Germany), the University of Sorbonne (France), Kiofo University (Japan), National University of Seoul (South Korea), Central European University and Open Society Institute (Budapest, Hungary), Manchester University (UK), Ecological Institute of the University of Georgia (USA), Massachusetts Institute of Technology (USA), Indiana University (USA), Moscow State University (Russia) and Moscow State University of Linguistics (Russia), Belarusian Ecological State

University (Belarus), Botanical Institute of the Chinese Academy of Sciences (China), UzSUWL (Uzbek State University of World Languages).

Currently, environmental terms have become objects of study by many linguists, in particular, E. Haugen in his monograph covered in detail ecolinguistics and its tasks as a new direction in linguistics [3]; I. V. Veregitina drew attention to the derivational-semantic aspect of ecoterms in Russian [4]; The research work of Kh. Jamalkhanov is devoted to the analysis of terms related to biology, where the author defines the most ancient, common Turkic layers of these terms [5]; E. A. Latyshevskaya studied the formation and development of the ecological system in English according to the historical stages of their formation [6]; and E. M. Gorokhova highlighted the features and differences in aspects of the formation of the term system "ecology of the earth" [7]. The listed sources have important scientific and practical significance.

The purpose of the study is to develop a functional model of a translated multilingual terminological dictionary on ecology.

To achieve this goal, the following theoretical and practical tasks were formulated:

1. consider the iconic nature of the environmental term;
2. explore and describe the formation and development, as well as the current state of English, Uzbek and Russian environmental terminology and terminology;
3. identify means of reflecting the environmental terminology system in industry dictionaries of various types: explanatory, translated and thesauri;
4. build and describe a field model of the term system of ecology in English, Uzbek and Russian languages.

The object of the study was environmental terms in Uzbek, English and Russian languages. The subject of the study is the lexical-, syntactic-, semantic- and nominative-derivative features of environmental terms in languages of different systems.

2. Materials and Methods

The following were used in the work: comparative typological method; historical-etymological method; component analysis method; semantic field analysis method; linguostatistical and other methods of research and analysis.

The assigned tasks required the use of linguistic structural research methods, such as definitional logical-conceptual generic and categorical analysis of environmental terminology, as well as a lexicographic method, including typological, functional and parametric analysis of terminological dictionaries. Directly in the translation thesaurus model itself, the method of comparative description is used.

3. Results

In many countries of the world, scientists note that the translation of environmental terms is a process of harmonization of the national language with foreign ones. The process of intensive growth of the industry over the past decade has made environmental problems a major concern for society today. Modern ecologists have a need to translate various environmental terms from foreign sources.

Usually, when translating specialized texts, the skill of accurately translating sentences requires some reasonable complexity. The reason is that most of the terms related to environmental protection come from foreign languages.

Scientists face various difficulties when translating terms from English and Russian into Uzbek. In such cases, the researcher is required to have a good understanding of the bilingual nature of the particular sentence. In particular, in Russia, forest hunters are engaged in forest hunting, pest and disease control. In Uzbekistan they are engaged in the protection of forest fauna and flora. In Canada, sustainable forest managers are responsible for protecting and conserving forests. One aspect that the translator should focus on is that

there are three different names and differences in the activities of foresters in the three countries.

A subtle aspect of the art of translation is that it is an indicator of consistency. An appropriate translation is one that accurately conveys the content and form of the original in their inextricable connection, showing both the semantic and stylistic side of the original source.

The accuracy of translation is not limited to word-for-word copying, mechanical repetition of words and adherence to the translated forms of the text. Instead, sentences are highlighted without repeating them directly. It is also important to compare the means of expression of the two languages, to determine their semantic and methodological functions. Indeed, we use dictionaries to translate environmental terms. If we pay attention to the information it contains, we can see in dictionaries the exact translation, meaning, origin or related phrases of the word. But we cannot get complete information about how this word is used in various information robes.

For example, there is the concept of water stress in conservation. If we look up this phrase in dictionaries, we will see that it is an indicator of water shortage. However, in science, water stress is defined as the percentage of water resources used annually in each country as a norm, in relation to the total estimated volume of water resources. The translator should consult with an industry expert and industry sources to explain the topic more broadly. For example, you can consult a land reclamation specialist about water stress [8].

In the lexical systems of English, Russian and Uzbek languages, there are differences in the semantic structure of the word and the semantic scope of the word. In different languages, literally, there are often different signs of the same event or concept, reflecting a language-specific understanding of the world, while the native language of this language inevitably causes difficulties in translation. An example is the word juniper (archa).

There is no foreign translation of this word into Uzbek. In other languages it is also translated as archa. But there are many types of juniper. We see more use of the term juniper in Russian sources instead of juniper and more in English literature. Therefore, we need to differentiate ourselves by a set of terms related to the field of ecology [9].

English-Uzbek terms are indirectly related, for example, to biology (biocenosis / biosenoz, aerobes / aeroblar, biomass / biomassa); in chemistry (radionuclides / radionuklidlar, dioxins / dioksidlar, aerosols / aerozollar); in geography (areal / areal, hydrosphere / gidrosfera, landscape / landshaft); in physics (absorption / absorbsiya, water cycle / suv aylanishi, energy resources / energiya resurslari); in geology (soil degradation/tuproq degradatsiyasi, croison/eroziya). In addition, many environmental terms in English, Russian and Uzbek are considered to be derived from Latin and Greek [10].

Foreign terms are classified according to their nature. When translating words, it is not easy to do this while maintaining its structure. In English, terms are divided into simple and complex words and phrases. For example, simple terms consist of one word:

- a. forest / o'rmon (uzb);
- b. flora / o'simliklar (uzb);
- c. sea / dengiz (uzb).

Complex terms consist of two or more words:

- a. river (daryo)+ side (tomon)= riverside (daryo bo'yi);
- b. over (ustida) + fall (tushmoq)= overfall (suv oqimi);
- c. jelly (jele) + fish (baliq) = jellyfish (meduza) [11].

If we pay attention to the construction of words and compound words above, we will see that words have different meanings when translated individually and a completely different meaning when translated additionally.

Moreover, depending on the use of foreign terms, it is reflected in three forms. Terms of the first type are used independently and do not lose their meaning:

The words “plant” «растение» (o’simlik) and “association” «ассоциация» (birlashma) together are translated as “plant association” «ассоциация растений» (o’simlik dunyosi).

In the second type of compounds, the first word is from scientific vocabulary, the second word is used in general use or in various scientific fields:

In combination with geological age, the words “геологический / geological / geologik” are usually used - scientific dictionary, “возраст / age / yosh”.

In the third type of phrases, both words refer to commonly used vocabulary: зеленый пояс / green belt / yashil maydon, пищевая цепь / food chain / oziq ovqat zanjiri. [<http://www.multitrans.ru/>].

4. Discussion

What methods do modern linguists use today when translating econames? Researchers are divided into the following categories:

1. Literal translation of the word. It is given by directly translating international words into another language. At the same time, the semantic and stylistic meaning of the word is preserved. For example:

- a. English ecotoxicology - Uzbek ekotoksikologiya and Russian экотоксикология (department of toxicology that studies the influence of toxic substances on ecosystems and their circulation in the biosphere);
- b. English ecotechnology - Uzbek ekotexnologiya and Russian экотехнология (actions, goods and services aimed at improving the life cycle and preventing harmful effects on the environment);
- c. English ecosystem - Uzbek ekotizim and Russian экосистема (refers to the natural relationship between various organisms living together and their habitat).

2. Come up with a suitable word or use an equivalent. This preserves the essence of the word. Side words and suffixes are processed. For example:

- a. English environmentalist - Uzbek ekolog and Russian эколог (researcher in the field of ecology);
- b. English ecoinnovation – Uzbek ekoinnovatsiya and Russian экоинновация (innovation in the field);
- c. English ecological-biological school - Uzbek eko-biologik maktab and Russian эколого-биологическая школа.

3. Transcription and transliteration. Translation transliteration and translated transliteration are partly characteristic of the translation of foreign environmental terms. In this case, certain environmental proposals are fulfilled through metaphorical or metonymic transfer [12].

For example: Toponym-ecological disaster, explosion, dangerous toponyms: Chernobyl, Fukushima, Hiroshima, Nagasaki, Odessa. The names of hurricanes, typhoons and tsunamis are Hurricane Catherine (USA), Typhon Haiyan (Philippines), Hurricane Sandy (Haiti), Indian Ocean Tsunami.

4. Lexico-semantic exchange (generalization, specification, modulation). In this category, the inversion state occurs during the translation process. The terms are taken into account on the basis of appropriate unity in terms of the mentality, lifestyle, and national culture of the translated people. This word has the same meaning in another language (paper version). This process is called modulation [13].

For example: English (Disaster preparedness) is translated into Uzbek by the phrase “preparedness for natural disasters”, which is given a softer (specific) negative connotation, and when expressed as (emergency preparedness) “preparedness for emergency situations” this is reflected in a more general, slightly frightening color

(generalization). English doesn't cause trouble! You can also take the phrase don't fight, don't cause inconvenience and don't compromise (modulation). That is, we adapt to our culture, our mentality [14].

Examples:

1. English Abiotic environment, Uzbek Abiotik muhit and Russian Абиотическая среда;
2. English Abiotic factor, Uzbek Abiotik omil and Russian Абиотический фактор;
3. English Abiotic alluvium, Uzbek Abiotik cho'kindi and Russian. Абиотический нанос;
4. English Water-supply re-circulated, Uzbek Aylanma suv ta'minoti and Russian Водоснабжение обратное;
5. English Hot lines, Uzbek Bevosita aloqa and Russian Горячие линии;
6. English Biological productivity (bioproductivity), Uzbek Biologik mahsuldorlik (biomahsuldorlik) and Russian Биологическая продуктивность (биопроductивность);
7. English Hypoxia or oxygen deficiency, Uzbek Gipoksiya yoki kislorod yetishmovchiligi and Russian Гипоксия или кислородное голодание;
8. English Dominant, Uzbek Dominant and Russian Доминант;
9. English Drain (Waters drainage), Uzbek Drenaj (Drenaj suvlar) and Russian Дренаж (Воды дренажные);
10. English Earth (Ground-level ecosystem), (Land cadastre), Uzbek Yer (Yer (quruqlik) ekotizimi), (Yer kadastr) and Russian Земля (Наземная экосистема), (Земельный кадастр);
11. English Waters underground (Ground-water level), Uzbek Yer osti suvlari (Yer osti suvlarining sathi) and Russian Воды подземные (Уровень грунтовых вод);
12. English Overhead irrigation, Uzbek Yomg'irlatish and Russian Дождевание;
13. English Chemical weed-killers and pest-killers (Toxic wastes), Uzbek Zaharli kimyoviy moddalar (Zaharli chiqindilar) and Russian Ядохимикаты (Отходы токсичные);
14. English Contamination (Pollution level), Uzbek Ifloslanish (Ifloslanish darajasi) and Russian Загрязнение (Уровень загрязнения), (B. Alikhonov, S. Samoilov, R. Ibragimov [15].

5. Conclusion

Therefore, care should be taken when translating any industry terms. At a time when the field of ecology is rapidly developing, special attention should be paid to the meaning and application of new innovative words entering the field. Considering the above, we can draw the following conclusions.

1. A translator or specialist must have sufficient knowledge of foreign languages before translating sentences from one language to another.
2. When translating texts related to environmental protection, it is advisable to be familiar with this area.
3. Must be able to analyze the lexical and grammatical composition of environmental terms and correctly use communication units.
4. It is necessary to create a list of abbreviations and abbreviations.
5. The meaning of the proposals should not lose sight of migration cases.
6. Obtaining an opinion from a professional ecologist on the final translation text ensures the perfection of the text.

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