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Specifics of Computer Discourse Translation from English into Russian

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***Abstract**:*

Relevance of the problem under study is caused by need of further development of science and technology in Russia and abroad and it inevitably puts on the agenda the issue of information exchange in the field of scientific and technological achievements. This article is directed on identification and analysis of main features of translation of lexical and grammatical phenomena of computer discourse.

The leading approaches to research of this problem are logical and linguistic analysis, method of actualization, selection, systematization and generalization with analysis of the specifics of lexical-grammatical phenomena of computer discourse point of translation studies. The main results of the study are that the concept of computer discourse and the characteristics of technical translation were analyzed; specificity of computer terminology translation was revealed; lexical and grammatical phenomena of computer discourse in terms of the theory of translation were investigated.

The article may be useful for IT teachers when preparing teaching aids and manuals on languages, seminars and special courses on English in the field of information technology and dictionaries of the English and Russian languages.

***Keywords:** Language, Translation, Text, Linguistics, Introduction, Computer, Discourse, Minority, Terminology, Semantics, Grammar.*

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1. Introduction

Development of science and technology in Russia and abroad inevitably puts on the agenda the issue of information exchange in the field of scientific and technological achievements. Computers and computer technology have become a part of human life. In terms of "information explosion" ability to navigate in a huge flow of information and to use it timely is of paramount importance. That is why the ability to work with literature in foreign languages is one of the qualification characteristics of a graduate. And practical application of a foreign language is becoming a basic requirement for technical high schools programs (Allwright, 1984; Brumfit, 1984; Canale, 1983; Hymes, 1987). Increased attention to the theory and practice of computer discourse translation is largely due to expansion of international economic, scientific and cultural relations, as well as extension of various forms of international cooperation.

Since "native" computer language is English, then the appropriate training of the user in the field specific terminology and emerging dialogues with a computer, make computer use more efficient. In most languages, including Russian, lexical and grammatical phenomena of computer terminology are secondary to the computer discourse in English. In particular, many of the components of the integrated Microsoft Office software product are written in English (Golubenko & Vasyutenkova, 2003; Ellis & Johnson, 1994).

Often there are problems in the adequacy of the translation of computer terminology, as a short English word can replace the whole narrative structure in other language, and translation of phrases and sentences related to computer technology and their use requires knowledge of certain grammatical and lexical features of the English language. Therefore, the main purpose of the article is to identify and analyze the main features of the translation of lexical and grammatical phenomena of the computer discourse. In this regard, we face the following objectives that need to be solved to achieve the goal:

- to examine the concept of computer discourse;
- to analyze the peculiarities of technical translation;
- to identify the specifics of computer terminology translation;
- to investigate lexical and grammatical phenomena of computer discourse in point of theory of translation.

Relevance of the problem under study is caused by need of further development of science and technology in Russia and abroad and it inevitably puts on the agenda the issue of information exchange in the field of scientific and technological achievements.

2. Methods and Materials

While preparing the article such methods such as the study research, analysis, synthesis, studying and generalization of innovative pedagogical experience were used.

Special literature, manuals and textbooks on theory of translation, research theses and articles on specifics of computer discourse and lexicographical sources were investigated during the study. We made a try to describe theoretical aspects and key concepts of the research, basic features of computer discourse translation from English into Russian.

Many scientists who applied to the analysis of computer discourse and specifics of its translation made their own, important for science contribution to the study of the problem. Among them we can call Galichkina (2001), Yefremova (2016), Samaricheva (2001), Tyulenev (2004), Podgornaya (2014), Barkhudarov (2010), Orlova (2006), Kutuzov (2011), Golubenko and Vasyutenkova (2003), Kvasova, Podvalniy and Safonova (2012) and others.

In spite of the fact that the concept "computer discourse" has entered linguistics rather recently, there are already a lot of works, where its definition is given. Thus, Samaricheva (2001) understands the term "computer discourse" as "entire set of texts with a common theme related to modern information technologies", i.e. texts about computers, and analyzes different types of texts on computer topics.

Galichkina (2001) understands computer communication as communication in networks and in her study she analyzes graphic, lexical, textual characteristics of computer discourse in the English and Russian languages. She argues that computer discourse has points of contact with mass communication, but does not coincide with it completely. Discrepancy can be explained with mutual orientation of computer communications and private nature of many texts.

Yefremova (2016) claims that under computer discourse we should understand communication, mediated by electronic means of communication, or in other words, computer communication, that is, computer discourse is an interpersonal communication on the Internet.

In general, the concept of computer discourse is interpreted in two ways by Russian linguists. On the one hand it is any communication on computer networks, communication with the use of a special kind of signals, which are electronic communication signals. On the other hand, computer discourse can be defined as communication on topics related to computers. But in general, we can say that computer discourse is the whole set of texts, in a situation of real live communication via computers, related to special information and technical subjects.

3. Results

As it has already been noted, translation of computer discourse as one of human activities arises from specific needs to master information technology, as well as from communication between people via technical means of communication (Hutchinson and Waters, 1990). Technical translation refers to a certain kind of translation, namely the translation of technical literature, terminology which is significantly different from art (Hadfield, 1992a; 1992b; Haines, 1989). Technical translation is not directed to transfer feelings, emotions, it does not have the goal of aesthetic and emotional impact on recipient and its main communicative function is a message. This fact (predominance of information aspect) allows us to concentrate attention more on what is expressed, rather than on how it is done in the system of source text (Kvasova, Podvalniy and Safonova, 2012).

All vocabulary used in computer discourse can be divided into special and general language vocabulary. The most characteristic part of the special vocabulary is terms. Computer terms should be understood as words or phrases that denote a particular concept in the field of information technologies and their practical application. These terms are characterized by stylistic neutrality and do not depend on context. It is clear, when translating it is necessary to maintain all of these term characteristics, which are achieved through translation of a term with a term. No substitution or any approximate, synonymous translation of a term with some related words or expressions, according to an interpreter, is allowed (Sakaeva and Spirina, 2015).

On the basis of our research, we drew the following conclusions:

1. The concept of computer discourse is interpreted in different ways depending on author's research goals.
2. Computer discourse translation as one of human activities arises from specific need of mastering information technology, as well as communication between people via communication technology.
3. The most prominent part of special computer discourse vocabulary are terms, which are defined as words or phrases that mean a particular concept in the field of information technology and their application in practice.
4. Starting translation of English texts in special sphere, it should be remembered that the English language belongs to analytical group of languages. When translating lexical units of computer discourse, remember the ways of word formation, and that grammatical relations between parts of a sentence are carried out by function words and fixed word order in a sentence.

4. Discussion

According to context, terms can be divided into the following categories:

- functioning in one terminological system (browser, software, roast beef);

- occurring in one terminological system, but having different meanings depending on context (nozzle);
- synonymous terms which are close in meaning, occurring in one terminological system (basin – "бассейн", catchment – "бассейн, водораздел "; run-off – "сток", water sewage – "сток, сточные воды");
- homonymous terms related to different terminological systems (mouse – a mouse in biology and as a part of a computer) (Kvasova, Podvalniy & Safonova, 2012).

Bilingual specialized explanatory dictionaries, combining characteristics inherent of both bilingual and explanatory dictionaries can at least partly solve the problem of translation of terms. Taking into consideration the fact that there are no bilingual dictionaries in all areas of science and technology, the algorithm of a translator's work with dictionaries should be the following. After detecting an unknown term in a text, he must first find its definition in an explanatory dictionary of the original language, and then he should look up its equivalents in a bilingual dictionary, and check them in an explanatory dictionary (Sakaeva and Yalalova, 2014).

Despite the laboriousness of the procedure, the variant of translation obtained in this way will be the most reliable. Another issue of the translation of terms deserving discussion is translation of terms-neologisms. In order to ensure the representativeness of the translated text, it is recommended to translate terms-neologisms creating new terms according to the same derivational model, as in the original language. One should not neglect the opportunity (if there is any) to consult with specialists (Tyulenev, 2004).

Starting translation of English literature in a special sphere, it should be remembered that the English language belongs to a group of analytical languages. So, when translating lexical units of computer discourse, we should remember the ways of word formation. For example, appropriate affixes are used for derivation of nouns, adjectives, and adverbs. For instance, suffixes "er", "or" are used to form nouns denoting a person or a device or a machine which perform action expressed by a verb: to sense → sensor ("датчик"). Nouns with the suffix "ee" refer to a person who is targeted by action of the original verb: to address → addressee ("адресат"). The main adverb suffixes are "ly", "ward": automatically ("автоматически"), backward ("назад") (Sigacheva, 2014).

Grammatical relationships between parts of sentences are carried out by means of function words (articles, prepositions, auxiliary words) and fixed word order in a sentence. An English word, depending on its place in a sentence can perform various functions, such as: «The design of automatic digital computers is not a simple matter» ("Проектирование автоматических цифровых компьютеров — непростое дело"). The word «a matter» in this case is a noun. Let's compare with the other sentence, «These coefficients did not matter» ("Эти коэффициенты не имели значения"). Here the word «to matter» is a verb-predicate. In the English sentence,

semantic intensity is weakened by the end of the sentence. Therefore allocated part of a sentence should be placed at the beginning, if there is a need to highlight it.

Transposition of words in a sentence, called inversion, to highlight different meanings of its parts can be shown in translation of the following sentences: «In Table 3 are given the result of new experiments» ("В таблице 3 представлены результаты нового эксперимента"). In this example, the predicate is put into position before the subject (simple inversion). «Of great importance in this is type of software used» ("В этом случае огромное значение имеет вид используемого программного обеспечения"). Semantic part of the complex predicate is put at the beginning of the sentence, but the subject is after the linking verb «be» (double inversion) (Kvasova, Podvalniy and Safonova, 2012).

5. Conclusion

It should be noted that this issue requires further investigation. New computer terms appear, and they require specific and reliable translation into the Russian language. So, we need to take into account the generally accepted rules of grammar of the particular language and all the nuances that may arise in process of translation.

6. Recomendations

The practical significance of our research is that the results and the selected language material may be useful for IT teachers when making teaching aids and manuals on languages, seminars and special courses on the English language in the field of information technology; when compiling dictionaries of the English and Russian languages.

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