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## MODERN FOUNDATIONS OF SCIENTIFIC AND TECHNICAL TRANSLATION

**Abstract:** The article is devoted to the concept of a term as the basis of scientific and technical translation. Methods of translation of technical terms and its features.

**Key words:** Term, scientific and technical, linguistics, linguistics, methods, forms, technology.

**Language:** English

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### Introduction

Among the many problems that modern linguistics studies, an important place is occupied by the study of the linguistic aspects of interlingual speech activity, called translation or translation activity. Translation is an ancient human activity. In connection with the emergence in the history of mankind of groups of people whose languages differed from each other, "bilinguals" were actualized, helping to communicate between multilingual groups. With the emergence of writing, translators joined the interpreters, translating various texts of an official, religious and business nature. From the very beginning, translation performed an essential social function, making possible inter-lingual communication between people. The dissemination of written translations opened up wide access for people to the cultural achievements of other peoples, made it possible for the interaction and mutual enrichment of literatures and cultures.[1]

Knowledge of foreign languages allows you to read books in the original in these languages. The first translation theorists were the translators themselves, who sought to summarize their own experience. The translators of the ancient world widely discussed the question of the degree of closeness of the translation to the original. Early translations of the Bible or other works considered sacred or exemplary were dominated by the desire to literally copy the original,

sometimes leading to ambiguity or even complete incomprehensibility of the translation. Therefore, later translators tried to theoretically substantiate the translator's right to reasonable freedom in relation to the original, the need to reproduce not the letter, but the meaning or even the general impression of the original.

The foundations of the scientific theory of translation began to be developed by the middle of the 20th century, when translation problems attracted the attention of linguists. Until that time, it was believed that translation cannot be included in the range of issues studied by linguistic science. The translators themselves believed that the linguistic aspects of translation played an insignificant, purely technical role. The translator had to know both the original language and the target language, but knowledge of languages was only a precondition for translation and did not affect its essence. By the middle of the XX century. the attitude to translation activity changed and its systematic study began. During this period, the translation of political, commercial, scientific and technical and other materials, where the features of the individual author's style, as a rule, are of little importance, came to the fore. In this regard, they began to realize more and more clearly that the main difficulties of translation and the entire nature of the translation process are due to discrepancies in the structures and rules of functioning of the languages

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involved in this process. Moreover, the increased requirements for the accuracy of translation emphasized the role of linguistic units. When translating materials of this kind, one could not be content with the fidelity of the translation "as a whole", the same effect on the reader of the original and the translation. [2]

The translation was supposed to ensure the transfer of information in all details, down to the meanings of individual words. Over time, the linguistic fundamental principle of the translation process has been updated. It was necessary to find out what the linguistic essence of this process is, to what extent it is determined by linguistic factors proper, to what extent such factors limit the accuracy of information transfer.

A sharp leap in the development of science and technology was the result of the fact that the main layer of all new words that appear in various languages every day is a special vocabulary. In this regard, it becomes necessary to study and streamline units of special vocabulary.[3]

Currently, there is a need to identify scientific and technical translation not only as a special type of translation activity and a special theory that investigates this type of activity, but also to assign the status of an independent applied discipline to scientific and technical translation. From the point of view of linguistics, the characteristic features of scientific and technical literature extend to its style, grammar and vocabulary. The main task of scientific and technical translation is to convey the information communicated to the reader in an extremely clear and accurate way.

This is achieved by a logically grounded presentation of factual material, without explicitly expressed emotionality. The style of scientific and technical literature can be defined as formal and logical. Scientific and technical texts reveal a number of grammatical features. [4]

The most typical lexical feature of scientific and technical literature is the richness of the text with terms and terminological phrases, as well as the presence of lexical structures and abbreviations. In such literature, texts occupy a special place that are oriented not so much to native speakers of a certain language, but to representatives of a certain professional group with certain extralinguistic knowledge.

Among the many problems that modern linguistics studies, an important place is occupied by the study of the linguistic aspects of interlingual speech activity, called translation or translation activity. Translation is an ancient human activity. In connection with the appearance in the history of mankind of groups of people whose languages were different from each other, "bilinguals" were actualized, helping to communicate between multilingual groups. With the advent of writing,

translators joined the interpreters, translating various texts of an official, religious and business nature.[5]

From the very beginning, translation performed an important social function, making possible interlingual communication between people. The dissemination of written translations opened up wide access for people to the cultural achievements of other peoples, made it possible for the interaction and mutual enrichment of literatures and cultures. Knowledge of foreign languages allows reading books in the original in these languages.

Due to the rapid development of modern technologies, the translation of scientific and technical terminology is especially relevant in recent years. Today, scientific and technical translation is not only a type of translation activity, but also a separate applied discipline.

A distinctive feature of scientific and technical texts is the abundance of terms and various phrases, formulas, graphs, the translation of which can cause a number of difficulties. And the main task of scientific and technical translation is a short and accurate presentation of information and the absence of any emotional coloring. Due to the rapid development of technology, new terms (neologisms) constantly appear in the scientific language, which even the latest dictionary does not have time to fix, which also presents great difficulties in translation.[6]

As for grammar, scientific and technical texts abound in the use of passive, impersonal and indefinitely personal constructions. Most sentences are complex and complex. Therefore, in the language of the scientific and technical style are widely used conjunctions, compound prepositions and various expressions. In addition, it is worth noting that the author of the text, trying to convey information and explain certain facts, discoveries, processes, avoids personal forms of the verb, replacing them with a passive voice. In this regard, it becomes obvious that all processes and phenomena in the text act as subjects, overshadowing the author of the text. Information presentation style the main feature of the scientific and technical text is the brevity of the presentation of the material and the clarity of the wording.[7]

Jidkov A.V., in turn, distinguishes the following features of the style of scientific and technical translation: strict consistency and consistency of all components of the idea presented by the author, meaningfulness of the text, the availability of a specialist in a particular area in terms of understanding the information presented, as well as the statement of a scientific fact.

It is very important to pay attention to the difficulties that a specialist may face when translating scientific and technical literature. All the difficulties that a translator may have.

Having considered some general features of the translation of scientific and technical texts, it is worth

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saying that the most important and important feature of scientific and technical texts, which can also cause a number of difficulties in translation, is the presence of specific terminology, which requires the translator to know the terms of a particular field. [8]

Due to the fact that the characteristics and behavior of a particular term are determined by the area of knowledge to which it belongs, the role of the main object of terminology (a science that studies special lexical units) is terminology - a set of terms used in specific area of expertise.

Despite the fact that linguists have been studying issues related to terminology for more than a decade, there is still no generally accepted definition for the concept of "term". The search for a definition of the concept "term", the most adequate to the essence of the corresponding object, in the science of terms does not stop for decades.

As mentioned above, terminology is a group of terms that functions in a specific area. Based on this definition, it becomes necessary to find out what terms are from the point of view forms, as well as what difficulties may arise when translating scientific and technical terms. [9]

Thus, today the issues related to the translation of scientific and technical literature are of great interest to specialists. The first chapter is fully devoted to the consideration of such concepts as translation, scientific and technical translation, terminology and terminology. The variety of definitions of the term "term" is due to the colossal variety of areas of knowledge in which the main layer of vocabulary is the term. The main advantages of each term is its accuracy, intelligibility, easy memorization and mastering. Moreover, each term has an exact concept, and the term itself tends to be unambiguous.

Thus, as a result of the study of the scientific and technical text, it can be concluded that the main stylistic feature of such a text is an accurate and clear presentation of the material in the complete absence of expressive elements that give the speech emotional saturation. In the scientific literature, metaphors, metonymic transpositions and other stylistic figures

that are widely used in works of fiction are almost never found.

For all its stylistic distance from the living spoken language, the scientific and technical text includes a number of more or less neutral in color phraseological combinations of a technical nature. The main requirements that a scientific and technical translation must meet are: accuracy - all provisions interpreted in the original must be stated in the translation; conciseness - all the provisions of the original should be stated, concise and concise; clarity - the conciseness and conciseness of the target language should not interfere with the presentation of vocabulary, its understanding; literary - the text of the translation must meet the generally accepted norms of the literary language, without using the syntactic structures of the original language. [10]

In the course of the study, it can also be highlighted that the characteristic features of a scientific and technical text are:

- 1) saturation with special terms and terminological combinations;
- 2) the presence of grammatical and lexical structures;
- 3) discrepancy in the use of similar stylistic features in the original and the translation;
- 4) different frequency of use of certain parts of speech.

All terms are combined into terminological systems expressing the concepts of science and technology. Difficulties encountered in translating terms are associated with shortcomings inherent in existing terminological systems. Among the most significant are the phenomenon of terminological synonymy, homonymy and polysemy, which makes it necessary to resort to contextual translation, which implies:

- Determination of the meaning of the translated term by context;
- Selection of an appropriate contextually equivalent term;
- Creation of an adequate text using the selected contextual equivalent.

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