

# THE MAIN FEATURES OF THE LANGUAGE OF SCIENTIFIC AND TECHNICAL LITERATURE

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terminology, scientific literature,

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### Annotation

The article discusses some of the lexical and grammatical difficulties that students face when reading and translating texts in their specialty. Special

attention is directed to some issues of terminology, since technical texts are saturated with both general scientific and technical terms that carry the main lexical content. The article also discusses the main sources of English technical terminology, as well as analyzes the most productive ways formation of English scientific and technical terms.

### Аннотация

Maqolada oʻrganuvchilar oʻz mutaxassisligi boʻyicha matnlarni oʻqish terminologiya, ilmiy adabiyotlar, va tarjima qilishda duch keladigan ayrim leksik va grammatik qiyinchiliklar haqida soʻz boradi. Ingliz tilidagi zamonaviy ilmiy-texnikaviy adabiyotlar uslubiga katta e'tibor qaratilgan bo'lib, u ingliz yozma tili me'yorlariga asoslanib, matnlarni tarjima qilishda ma'lum bo'lishi va e'tiborga olinishi kerak bo'lgan o'ziga xos xususiyatlarga ega. Terminologiyaning ayrim masalalariga alohida e'tibor qaratilgan, chunki texnik matnlar asosiy leksik tarkibni o'z ichiga olgan umumiy ilmiy va texnik atamalar bilan boyitilgan. Maqolada, shuningdek, ingliz texnik terminologiyasining asosiy manbalari ko'rib chiqiladi, shuningdek, ingliz ilmiy-texnik atamalarini shakllantirishning eng samarali usullari tahlil qilinadi.

#### Калит сўзлар

texnik uslub, ilmiy-texnik matn, rasmiy va mantiqiy uslub, umumiy ilmiy va texnik atamalar.

Linguistic study of the language of scientific and technical literature, no doubt, proves that all it is considered to be a certain functional style of speech that has characteristic features. The style of scientific presentation attracts the attention of many researchers in our time. The characteristic features of the scientific and technical style are its informativeness (content), logicality (strict sequence, a clear connection between the main idea and details), accuracy and objectivity, and clarity and understandability arising from these features.

The need to argue what is being said and make it easier for the reader to understand by clearly articulating the text leads to the widespread use of parallel constructions and introductory words.

An important characteristic of the scientific and technical texts, which is reflected in the selection and use of language means, is also its desire for conciseness, brevity and compactness of presentation, which leads to syntactic compression. [5] Syntactic compression reduces redundancy while maintaining the amount of information. It is carried out by many different means: in particular, the language of English scientific and technical literature is characterized by the widespread use of elliptical constructions, the Russian language - not subjective one-part sentences; an important characteristic is also the presence of a large number of sentences with homogeneous members.

For the same purpose, constructions saturated with nouns in the genitive case are widely used in Russian, and attribute groups are mainly used in English, usually in the form of more or less long chains. Against the background of complex syntactic constructions, short simple sentences are highlighted and fix the reader's attention, additionally emphasizing important provisions, facts or arguments. Such short sentences placed at the end of the paragraph with a simple syntactic pattern aphoristically summarize the reasoning, and at the beginning of the paragraph they serve to introduce a new thought, enumeration or proof. In addition to this compositional role, they also play a rhythm-forming role.

Scientific and technical terminology is the most important layer of vocabulary, subject to constant and active enrichment and change due to the scientific unification of the terminology of a particular field of knowledge. To a large extent, the wide use of the so-called special general technical vocabulary, which also constitutes one of the specific features of the scientific and technical style, contributes to the mutual understanding of specialists. [1] These are the words and combinations that do not have the property of a term to identify concepts and objects in a certain area, but



are used almost exclusively in this area of communication, selected by a narrow circle of specialists, familiar to them, allowing them not to think about the way of expressing thoughts, but to focus on the essence of the matter.

Special vocabulary includes all kinds of derivatives of terms, words used to describe the connections and relationships between terminologically designated concepts and objects, their properties and features, as well as a number of popular words used, however, in strictly defined combinations and thus specialized. Such vocabulary is not usually recorded in terminological dictionaries, its meanings are not given by scientific definitions, but which is no less characteristic of the scientific and technical style.

Of course, not only terminological and special vocabulary is used in scientific and technical materials, they contain a large number of general language units used in any functional styles. [3] At the same time, the general language vocabulary of academic scientific literature usually refers to semantic fields that describe analysis, process, conclusion, etc., and is characterized by the absence of emotional coloring and connotation. It is a neutral, modern, and generally written literary form. Words and phrases of this lexical layer of scientific texts form a developed system of interchangeable synonyms. Most of them are cliches, stereotypical words and phrases.

This feature must be taken into account when translating texts of this functional style. As already noted, in pragmatic texts, language is primarily a means of transmitting cognitive information. [4] Scientific prose reflects rational cognitive activity, and therefore it is customary to think that emotional or figurative vocabulary has no place in it. However, this is not quite true. Every creative activity of a person is connected with emotions. Therefore, emotional vocabulary is not completely excluded from the scientific text, especially modern English.

The features of modern scientific and technical texts are:

- use of stylistically diverse vocabulary

- abundance of neologisms

- as well as the widespread use of metonymy and metaphor, which is characteristic of fiction texts.

So, if in English-language texts of the scientific style it is permissible to use expressive vocabulary, then in Russian-language texts such units should be replaced by neutral ones. The noted lexico-grammatical and stylistic features of scientific and technical materials have a direct impact on the communicative nature of such materials, which must be reproduced in translation.

At the same time, it is important to note that all these features, although inherent in scientific and technical literature in any language, nevertheless, do not pass unambiguously from language to language, but are expressed in a peculiar way in each individual language. [2]

Firstly, to convey the same relations, non-identical means of language are used, since lexical means can be replaced by grammatical ones, and vice versa.

Secondly, languages are characterized by different frequency of use of certain lexical, grammatical or stylistic means. When translating scientific and technical literature, it is necessary to take into account both general and specific features of the scientific style for a given pair of languages, since only in this case can a functionally adequate translation be achieved.

Technical literature includes the following types of texts:

-proper scientific and technical literature, vol. monographs, collections and articles on various problems of technical sciences; educational literature on technical sciences (textbooks, manuals, reference books, etc.);

- popular science literature on various branches of technology; technical and shipping documentation;

- technical advertising. The main distinguishing feature of scientific and technical literature is that it is designed for a specialist in this field of knowledge.

The language of scientific and technical literature has its own grammatical, lexical, phraseological features and abbreviations.

Among the different types of scientific and technical literature, patent literature is distinguished by a significant originality. Firstly, it is a canonical form inherent in the description of patents, and secondly, the language of patent descriptions, which combines the features of two styles: scientific and technical and official business, so the translation of patents causes certain difficulties. It is known that the main function of scientific and technical literature is communication, and this determines the information function of the language of scientific and technical literature.



## Literature:

1. Борисова Л. И. Пособие по научно-техническому переводу». Методологический обзор. М., НВИ- Тезаурус, 2008. - 60 с.

2. Валеева Н. Г. Введение в теорию и практику перевода / – М.: Изд-во РУДН, 2006. – 85 с.

3. Vannikova YuV. Scientific and technical translation. Moscow: Nauka; 1987.

4. Паршин А. С. Теория и практика перевода / А. С. Паршин. – СПб.: СГУ, 1999. – 203 с.

5. Retsker YaI. Technique of technical translation. Moscow: Central Institute of Technical and Economic Information; 1934.