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Problems of equivalence and adequacy in translation of technical texts

The article reviews the concept of equivalence in Russian and English texts. The topicality of the work is determined by more and more increasing importance of scientific and technical translation in the context of industry development. Its specific nature and main characteristics as well as various types of equivalence and its key features are described. The relevance of this work lies in the linguistic research of lexical peculiarities of translation transformations. It acquires a special importance due to the need for a comprehensive study of the language of science and technology at the present stage of technological progress. Different views and theories of the equivalence and adequacy concepts are revealed. The problem of technical translation is of great importance nowadays, therefore common difficulties that a translator faces are identified in the article. Moreover, recommendations on technical translation are given.

Keywords: technical documentations, scientific and technical texts, technical translation, techniques, source language, target language, adequacy, equivalence.

Introduction

Translation is one of the oldest occupations of man. To translate means to express correctly. Different warehouses of thinking, different literature, different epochs and different levels of development collide in translation. Currently, the translation of scientific and technical texts play an important role. The translator should strive for the most adequate and equivalent translation, even if he is not a native speaker of the translation language.

Qualitative translation of technical documentation assumes great responsibility, since the type of translation has a certain specificity. Technical texts are created to describe certain technological processes, as a result inaccuracy, which may include the translation of this technical documentation leads to very bad consequences. That is why it is important that the technical translation of documents convey the meaning of the original as accurately as possible. Translation of various technical literature, even the most complex should ultimately be understandable for perception and naturally have semantic certainty.

The characteristic features of the scientific and technical style are its informativeness (meaningfulness), logicity (strict sequence, clear connection between the basic idea and details), accuracy and objectivity and the clarity and clarity resulting from these features. Individual texts belonging to this style have these features to a greater or lesser extent. However, all such texts show a predominant use of linguistic means, which contribute to the satisfaction of the needs of this sphere of communication.

Equivalence adequacy of translation of technical texts

Scientific and technical translations, in connection with the special requirements imposed on them, require considerable attention to the achievement of equivalence and the adequacy of translation from English into Russian.

In the translation business, there are a number of special methods aimed at creating an adequate translation. So, two methods of translation are distinguished, direct translation or indirect (indirect) translation.

Let's note, first of all, that in general outline it is possible to outline two ways of translation, according to which the translator follows: Translation direct or literal and indirect (indirect) translation.

Indeed, there can be a case where the message in the source language is perfectly translated into a message in the target language, because it is based either on parallel categories (structural parallelism) or on parallel concepts (metalinguistic parallelism). But it can also happen that the translator states that there is a «gap» in the language of translation, which must be filled with equivalent means, ensuring that the overall impression of the two messages is the same. It may also happen that, due to structural or metalinguistic differences, some stylistic effects can not be conveyed in the language of translation, without changing to some extent the order of the elements or even lexical units. It is clear that in the second case it is necessary to resort to more sophisticated methods, which at first glance may cause surprise, but the course of which can

be traced for the purpose of strict control over the achievement of equivalence. These are the methods of indirect (indirect) translation. Methods 1, 2 and 3 are straight lines. The remaining methods are indirect.

1. Borrowing. When the semantics, structure, and form (sound composition and spelling) of the term are borrowed in the translation process, we are dealing with a borrowing that allows us to fill a gap, usually of a metalinguistic nature (new technique, unknown concepts). Borrowing would not even be such a way of translation, which we might be interested in if the translator did not need it at times to create a stylistic effect. For example, in order to bring in the so-called local flavor, you can use foreign terms and talk about miles and poods in Russia, dollars and parties in America, tequila and tortillas in Mexico, etc.

There are also old borrowings, which in fact are already such for us as not, because they figure in the lexical composition of our language and have become accustomed. The translator, first of all, is interested in new borrowings, and even borrowings of an individual character. It should be noted that often borrowings enter the language through translation, among them there are semantic borrowings, or «false friends of an interpreter», which should be especially feared.

The problem of local color, solved with the help of borrowing, affects, first of all, the sphere of style and, consequently, the message itself.

The main trends in the translation of the neologisms of scientific and technical texts are the borrowing of new terms or their calculating. A huge wave of borrowings, which occurred in the 90s of the XX century, supplemented the lexical composition of the Russian language with a variety of general technical, engineering and especially computer terms, many of which are documented by dictionaries, for example, a chip, an Internet site and others. However, the excessive borrowing of terms to date, fortunately, gives way to lexical substitutions. Despite this, there is often an unreasonable borrowing of already existing terms or realities in Russian. In this connection, it is necessary to emphasize the availability of the translation option in Russian and the absence of the need for borrowing.

2. Calquing. Calquing is a special kind borrowing: it is an adoption from a foreign language one or another of the syntagmas and literally translate the elements that make up it. Thus it obtains either a translation of the expression using the syntactic structures of the translation language, introducing new expressive elements into it, or by calculating the structure, and introducing new constructs into the language, for example, Science-fiction.

As with borrowing, there are old stable tracing papers that can only be mentioned in passing, as they, like borrowing, can undergo a semantic evolution, becoming «false friends». More interesting are for the translator new tracing paper, with which he avoids borrowing, filling in the blanks. In such cases, apparently, it is better to resort to word formation on the basis of the Greek-Latin fund or to use hypostasis (the transition of one part of speech to another by conversion).

If the structure of the translated lexical unit in both languages coincides, we are dealing with a so-called semantic tracing paper. On the basis of the above-mentioned English term tree, the term tree structure is created, which is transmitted in Russian by the term tree structure (rather than the tree structure or tree structure, as one would expect). When using semantic calculating, the structure of the term created in the original language corresponds to the norms of the original language, and the structure of the term created in the target language corresponds to the norms of the target language. The only semantics of the terms of both languages is common, why this method of translation is called semantic calculating. In the technical sciences, element-wise translation (calculating) of structurally complex terms is also widespread: the English «swithing diagram», «motor selector» or «hard disk».

3. Literal translation. A literal translation, or translation «word for word», means a transition from the source language to the translation language, which leads to the creation of a correct and idiomatic text, while the translator observes only the observance of the compulsory norms of the language.

In principle, literal translation is the only reversible and complete solution of the question. There are many examples in translations made from languages belonging to the same family (French - Italian), and in particular between languages belonging to the same cultural orbit. If it is possible to state the presence of some cases of word-for-word translation, it is because there are metalinguistic concepts that can also reflect the facts of coexistence, the periods of bilingualism and conscious or unconscious imitation, which is associated with political or intellectual prestige [1; 78]. This can also be explained by the peculiar convergence of thoughts and sometimes structures that can be observed among the languages of Europe (compare, for example, the formation of a definite article, the similarity of the concepts of culture and civilization, etc.), which caused in life the appearance of some interesting articles, belonging to the pen of the supporters of «General Semantics».

Before this method, it was possible to carry out the translation process without resorting to specifically stylistic methods. If it was always so, then the real work should not have been born, and the translation, reduced to a simple transition, «the original language - the language of translation» would not be of any interest. The solutions proposed by the Massachusetts Institute of Technology grouping that translation should be entrusted to electronic computers that can implement it on scientific texts rests more on the existence in these texts of parallel segments corresponding to parallel ideas that, as one would expect, are revealed in many cases in a scientific language. But if, acting in accordance with method No. 3, the translator recognizes the literal translation as unacceptable, then indirect (indirect) translation is necessary. By unacceptability it is meant that the message, which is translated literally:

- a) gives a different meaning;
- b) does not make sense;
- c) impossible for structural reasons;
- d) does not correspond to anything in the metalinguistics of the translation language;
- e) corresponds to something, but not at the same stylistic level of the language.

The equivalence of messages is based, ultimately, on the identity of situations, which alone allows us to assert that the language of translation contains certain characteristics of reality that are not in the original language.

Of course, if we had the vocabularies of the signified words, it would be sufficient to find our translation in an article corresponding to the situation identified by the message in the original language. Since there are really no such dictionaries, we proceed from words or from units of translation, which we must subject to special procedures in order to arrive at the desired message. Since the meaning of the word is a function of its place in the utterance, it sometimes becomes necessary to have such a rearrangement, which is too far from the starting point, and no dictionary can take it into account. Since there are an infinite number of combinations between signifiers, it is not difficult to understand why an interpreter can not find ready-made solutions to his problems in dictionaries. Only he alone fully knows the meaning of the message as a whole, in order to make the necessary choice, guided by him, and only the message itself, reflecting the situation, allows, ultimately, to make a final judgment about the parallelism of the two texts.

4. Transposition. We call it the way, which consists in replacing one part of speech with another part of speech without changing the meaning of the whole message. This method can be used both within the same language, and, in particular, and in translation [2].

The basic and transposed turns are not necessarily equivalent from a stylistic point of view. The translator should use the transposition method if the resulting traffic fits better in the entire phrase or allows the restoration of stylistic nuances. It should be noted that the transposed circulation usually has a more literary character. A particularly special case of transposition is «crossing».

5. Modulation. Modulation is a variation of the message, which can be achieved by changing the angle or point of view. This method can be resorted to when it is clear that a verbatim or even a transposed translation results in a grammatical correct translation, but contrary to the spirit of the language of translation.

Just as in the case of transposition, we distinguish between free and optional modulation and modulation stable or compulsory. The difference between stable and free modulation is essentially a matter of degree. When we are dealing with stable modulation, the high frequency of use, the full acceptance by the letter, the tightness in the dictionaries (or in the grammar) leads to the fact that any person who perfectly speaks two languages does not hesitate to choose this method.

With free modulation, there is no stable fixation, and the process is repeated every time. Note, however, that it does not follow from this that such modulation is optional; it should lead, when properly applied, to an ideal solution for the target language in accordance with the situation proposed by the source language. So, you can see that there is only a difference in degree between stable and free modulation and that free modulation can become stable at any moment as soon as it receives a high degree of frequency or is presented as the only solution (this is usually done on the basis of the analysis of bilingual texts as a result of a discussion at a bilingual conference, or, based on well-known translations that have a high literary prestige).

The transformation of free modulation into a stable form always occurs when it is fixed in dictionaries or in grammars and becomes the subject of teaching. From this point on, the rejection of modulation is condemned as a violation of the law.

6. Equivalence. We have repeatedly emphasized the possibility that two texts describe the same situation using completely different stylistic and structural means. In this case we are talking about the equiva-

lence. A classic example of an equivalent is the situation when an awkward person clogging a nail gets to himself on the fingers - in French he will exclaim Aie, in English he will exclaim Ouch.

This example, although rough, emphasizes the special character of the equivalence: it is often syntagmatic in character and affects the entire message. It follows that most of the equivalents that we constantly use are stable and are part of idiomatic phraseology, including clichés, sayings, adjective or substantive stable combinations, etc. Proverbs and sayings are, as a rule, an excellent illustration of this phenomenon. The same goes for idiomatic expressions: to talk through one's hat, as like as two peas, which in no way should be counted; and, however, this is what we see in the so-called bilingual peoples who are victims of the constant contact of their languages, as a result of which they do not have a proper knowledge of either one. However, it may happen that some tracing papers are ultimately adopted by another language, unless the situation they designate is new and is capable of acclimating to foreign soil. However, the interpreter should not take responsibility for the introduction of cripples in a well-organized language: only the author can afford such a fantasy, the responsibility for the success or failure of which lies entirely with him. In translation, one should follow more classical forms, since all novelties in calculating cause accusations of introducing Anglicisms, Germanisms or Spanishisms into the language [3; 57].

7. Adaptation. The seventh way is the extreme limit in the translation process. It is applicable to cases where the situation referred to in the source language does not exist in the translation language and must be transmitted through another situation that we consider equivalent. This is a special case of equivalence, so to speak, the equivalence of situations.

The process of adaptation can be divided into several stages:

- 1) preparatory: a list of information sources that can help an interpreter in the process of work is compiled; the most difficult places are analyzed; a plan is drawn up for the implementation of all stages of the project;
- 2) translation: joint work of a specialized translator, editor and technical specialist;
- 3) final: creating a clear logical structure of the document, searching external sources for missing information and integrating it into a document, developing additional glossaries, dictionaries and reference systems.

The refusal to adapt, which affects not only the structures, but also the very development of ideas, thoughts, and the way they are actually presented in the paragraph leads to the presence in the «correct» text of some vague tonality, something false, which is invariably manifested in the translation. Unfortunately, such an impression is very often produced by texts published by modern international organizations whose members, through ignorance or from the desire for misunderstood accuracy, require the literalness of translations, the maximum amount of skimming. The text should not be tracing paper either in the structural or the metalinguistic terms.

Touching upon an extremely serious problem that can not be properly considered because of the large volume, namely: the issue of changes in thinking, in cultural and linguistic plans, which may entail in the long term the availability of important documents, school textbooks, journal articles, scripts to films, etc., created by translators who can not or do not risk making indirect translations. In an era when «excessive centralization and lack of respect for the culture of others are pushing international organizations to use one working language to create texts that are then hurriedly translated by translators whose work is little appreciated and which is always too small, a situation can arise that 4/5 our planet will feed exclusively on translations and die intellectually due to the constant consumption of this mash».

The ways to achieve adequacy:

When redistributing content, the value of one word can be redistributed into several words and vice versa. Perhaps this is a change in the categorical affiliation of words, for example, instead of a substantive, a verb is used, instead of an adjective, an adverb is used.

The syntactic structure of the sentence is also transformed, which can be expressed in a complete reformulation. This method includes those cases in which the meaning of the entire passage of the original as a whole is not transferred to the meaning of certain elements of the source text. At this reception, apparently, it is necessary to act as follows:

- to understand the meaning of the original statement;
- to disregard the concrete way of expressing this meaning;
- retell it in your own words, observing all the norms of this functional style.

In many cases, the use of translational transformations is justified and necessary, because often there are scientific and technical texts, parts and even individual sentences of which are not amenable to literal transla-

tion, either because of the peculiarities of constructions not characteristic of the Russian language, or due to the presence in the text of certain not convertible turns, expressions or terms.

All kinds of transformations carried out in the translation process can be reduced to four elementary types, namely:

Permutations are changes in the arrangement of language elements in the translation text as compared to the text of the original. Elements that can be rearranged are usually words, phrases, parts of a complex sentence, and independent sentences in the text.

Replacements is the most common and diverse type of translation transformation. In the process of translation, the substitution may be subject to both grammatical and lexical units, in connection with which one can speak about grammatical and lexical substitutions. The grammatical ones include the following types: replacement of word forms, replacement of parts of speech, replacement of sentence members (reorganization of the syntactic structure of the sentence), syntactic substitutions in a complex sentence;

Additions. This type of translation transformation is based on the restoration of the translation of the «pertinent words» omitted from the FL.

An omission is a phenomenon just the opposite of adding. By omission, we mean the omission of certain «redundant» words in the translation.

Using these techniques helps to achieve an adequate translation.

Conclusion

The basic requirement for the language of technical literature is the precise presentation, description and explanation of the facts. There are differences in translation of the English scientific and technical text. We also found that there is a contradiction between the requirement of an exhaustive transmission of the semantic content of the source text and the requirement of observing the norms of the target language. Thus, the considered techniques help to achieve equivalence and adequacy in translation. But at the same time, the translator must translate from his native language to the FL or vice versa, only then he will achieve complete equivalence, identity and adequacy [4; 65].

Translation of scientific and technical texts must correctly convey the meaning of the original in a form that is as close as possible to the form of the original. Retreats should be justified by the peculiarities of the Russian language and the requirements of style. Translation should not be literal or free retelling of the original. Although elements of both are necessarily present. It is important not to lose the essential information of the original.

It is necessary to understand the equivalence and adequacy of the translation. «Equivalence» means the generality of content and semantic closeness of the original and the translation. Adequacy means the correspondence of translation as a process to these communicative conditions. These techniques help to achieve equivalence and adequacy in translation. But translator should carry out translation from the native language on FL or on the contrary, only then he will reach full equivalence, identity and adequacy.

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Техникалық аудармада кездесетін эквиваленттік және тепе-теңдік проблемалары

Мақала орыс және ағылшын тілдеріндегі эквиваленттік тұжырымдама қарастырылды. Жұмыстың өзектілігі өнеркәсіптік даму контекстіндегі ғылыми-техникалық аударманың өсіп келе жатқан маңыздылығымен анықталды. Негізгі сипаттамалары, сондай-ақ эквиваленттің әртүрлі түрлері және оның негізгі ерекшеліктері сипатталған. Бұл жұмыстың маңыздылығы лексикалық ерекшеліктерді

лингвистикалық зерттеуде жатыр. Техникалық аударма техникалық прогрестің заманауи сатысында ғылым мен техниканың тілін жан-жақты зерделеу қажеттілігіне байланысты. Эквиваленттік және тепе-теңдік ұғымдарының әртүрлі көзқарастары мен теориялары анықталды. Қазіргі уақытта техникалық аударма мәселесі өте маңызды, сондықтан мақалада аудармашыға тап болатын жалпы қиындықтар көрсетілген. Техникалық аударма бойынша ұсынымдар берілді.

Кілт сөздер: техникалық құжаттама, ғылыми-техникалық мәтіндер, техникалық аударма, техника, бастапқы тіл, мақсатты тіл, сәйкестік, баламалылық.

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Проблемы эквивалентности и адекватности в переводе технических текстов

В статье рассмотрено понятие эквивалентности в текстах на русском и английском языках. Актуальность работы определяется возрастающей важностью научно-технического перевода в контексте развития промышленности. Описаны основные характеристики, а также различные типы эквивалентности и ее ключевые особенности. Значительность этой работы заключается в лингвистическом исследовании лексических особенностей. Технический перевод приобретает особое значение из-за необходимости всестороннего изучения языка науки и техники на современном этапе технологического прогресса. Выявлены различные взгляды и теории концепций эквивалентности и адекватности. В настоящее время проблема технического перевода имеет большое значение, поэтому в статье указаны общие трудности, с которыми сталкивается переводчик. Предоставлены рекомендации по техническому переводу.

Ключевые слова: техническая документация, научно-технические тексты, технический перевод, методика, исходный язык, целевой язык, адекватность, эквивалентность.

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