

CHALLENGES OF TEACHING TRANSLATION OF TECHNICAL PAPERS TO ENGINEERING STUDENTS

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Abstract

The article deals with challenges of teaching translation of technical papers to engineering students. The peculiarity of technical translation of scientific documentation is shown. Stylistic characteristics of the translation of scientific and technical papers are dealt. Grammatical peculiarities of the translation of scientific literature are shown.

Keywords: technical translation, scientific literature, grammatical peculiarities, stylistic characteristics.

Анотація

В статті досліджені труднощі викладання перекладу студентам інженерних спеціальностей. Проаналізовані стилістичні характеристики та граматичні особливості перекладу технічної літератури.

Ключові слова: технічний переклад, наукова література, граматичні особливості, стилістичні характеристики.

Introduction

Translation is an exact reproduction of the original source by means of another language while preserving the unity of content and style. It is believed that technical translation is less challenging than fiction translation, because the technical translator needn't look for equivalents of various metaphors and other stylistic means, which are inherent in fiction and journalistic style. Technical translation difficulty lies elsewhere. The basis of technical translation is formal and logical style, which is characterized by precision, unemotionality and impersonality of information transfer. Technical translation shall be as close to the original source as possible.

A slight deviation from the meaning may have unintended consequences (for example, inaccurate translation of technical equipment manuals can lead to an accident on the site). Therefore, in contrast to the fiction translation, technical translation does not allow any inaccuracies or deviation from the original source. In technical translation, each word and definition is translated precisely, eliminating ambiguity of understanding. Technical translation is saturated with various highly-specialized terms. Grammar of technical translations is characterized by the use of specific and firmly established grammar rules, e.g., indefinite-personal and impersonal constructions, passive voice, and non-finite forms of the verb.

Process

If one needs to quickly get acquainted with the simple technical documentation, it is sufficient to use computer-based translators. To provide in-depth study of scientific literature, translation must be performed by a professional who commands the foreign language and obtains technical knowledge in a particular area, e.g., electrical power engineering, heat power engineering, etc. The goal of training technical translation skills is to teach very accurately and clearly to convey in another language any technical information.

The peculiarity of technical translation of scientific documentation is an excessive amount of specialized terms, service and introductory words, frequent use of abbreviations, lexical neologisms, and realias. A significant role in the scientific and technical papers is played by prepositions and complex conjunctions (e.g., in order that, provided that, as though, etc.) which create logical connections between the

individual elements of sentences. In addition, the scientific and technical papers frequently use adverbs, which are integral parts of the development of logical thinking. Under the realias of scientific and technical papers we understand the titles, the brands of equipment and materials.

Specialized terms are to be translated using special dictionaries and glossaries. The realias, as a rule, are not translated but transliterated or given in the text in their original writing. Optimal translation solution for the phraseology is a search for identical phraseological items in the target language. In the absence of direct correspondence, the original idiom can be translated by searching for similar phraseology items, having a similar meaning with the original one, but built on a different verbal and image basis. It should be remembered that idioms, often having similar meaning but different form in various languages, are uniquely emotionally and associatively colored, and not always interchangeable. Geographical names and wellknown proper names are given in Ukrainian transcription.

The translation process always takes place strictly within the logical thinking, i.e., those who are capable of thinking logically are likely to make the proper translation. Experts in logic say that to understand an unfamiliar term, we need to analyze the context. In the course of this analysis, we set different semantic connections and relationships between the unknown term and other words, the meaning of which is well known. Such cases are very common in the translation from the foreign language into the native language.

Stylistic peculiarities of the translation of scientific and technical papers are language clarity, lack of expressive, emotional and imaginative patterns. The texts of technical manuals and specifications often contain sentences without a predicate or a subject, as well as sentences, consisting of recitations only. The accuracy of the scientific and technical translation is determined by how well the translator commands the source language and the subject of discussion. The clarity of the text can be defined as its semantic unambiguity. In the authors identified three main categories of stylistic defects that deny the uniqueness of the text:

sentence amorphousness; logical stress shift in the sentence; “parasitic” relationships between words. The authors suggest that semantic unambiguity of the text can be achieved by overcoming such defects of style as the excessive use of possessive case, the repetition of the same single-root words in a sentence, agglomeration of long words, pseudo-scientific patterns, bureaucratic style, etc. It is necessary to avoid literal translation which always leads to the distortion of an original meaning, or violation of the rules of the Russian language. The literal translation is based either on formal resemblance of the English word with the Russian one, or the use of the main or most common meaning of the English word without considering the context as a whole, e.g.,

plant – a herb not a station, machinist – an engine driver not an operator, package – wrapping not software, etc.

Knowledge of the typical translation errors and their causes contribute to their prevention. Translation errors are divided into two main types: speech, and functional and informative. Speech errors, in turn, are subdivided into system-speech and normative speech errors. They feature a violation of the norms of language and speech standards (usage). Functional and informative errors are functionally unreasonable deviation from the original text, adversely affecting the transfer of its meaning. In terms of its negative impact on the quality of the original source translated, they are divided into the “distortions” and “inaccuracies”.’ The distortions are errors in the translation, misleading the translation recipient about the content of a source text. Inaccuracy features lesser degree of equivalence violations, and less misleading impact, e.g.,

provide a means – give a chance not ensure a measure, to process – for the procedure not to produce, silicon – graphite not carbonium, etc.

Grammatical peculiarities of the translation of scientific and technical papers are characterized by frequent use of participial and verbal adverb phrases, simple, expended and complex sentences, passive voice, infinitive, participial and gerund phrases. The great danger for the translator lies in the fact that both English and Ukrainian feature a lot of similar grammatical forms and syntactic structures, the functions and meanings of which do not match in the languages. Similar names of such forms and constructions, borrowed both in Ukrainian and in English from Latin, should not be misleading. English infinitive and participle functionally and meaningfully differ from the corresponding Ukrainian forms. In the course of translation, it is required to use grammatical transformations. Functional correspondence is achieved by a complete change

of structures, word order and by replacing parts of speech and sentence, adding and omitting words. The ability to adequately translate foreign text is one of the goals of training, even though it is not aimed at training a highly-qualified translator. The essence of adequate translation is not the transfer of letters but the spirit of the text. Each language has its own unique means, characteristics and properties, so to faithfully convey an image or phrase, sometimes a translator shall completely change them.

Conclusion

This paper discusses the issues of professional translation of scientific and technical papers by the example of power engineering from a linguistic point of view. Translation of technical documents is the field of professional translation activity. The professional translation shall be performed by highly qualified personnel, commanding a foreign language, professional knowledge, specific terminology, being able to adequately and competently express their thoughts in the target language. Specific requirements for the scientific and technical translation are the ability to suggest accurate terminology equivalents, which is a necessity for adequate translation. Rather serious issue in the translation of scientific and technical texts is the problem of nonequivalent terms. The origin of non-equivalent vocabulary is differences in the realities of scientific environment. In this case, most of the non-equivalent terms can be translated by calquing, using the lexical and grammatical transformations. Another translation issue is when one English term corresponds to several terms of the Ukrainian language. In this case, the translator requires not only a high enough level of native language and standard of speech, but also deep knowledge in the field the document to be translated refers to.

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