Impact Factor:	ISRA (India)	= 6.317	SIS (USA) = 0.912	ICV (Poland)	= 6.630
	ISI (Dubai, UAE	= 1.582	РИНЦ (Russia) = 3.939	PIF (India)	= 1.940
	GIF (Australia)	= 0.564	ESJI (KZ) = 8.771	IBI (India)	= 4.260
	JIF	= 1.500	SJIF (Morocco) = 7.184	OAJI (USA)	= 0.350
60L 1 1			Issue	Article	









Shahnoza Dusmamatovna Razakova Chirchik State Pedagogical University Teacher, Uzbekistan sh.razakova@cspi.uz

# CHALLENGES AND DEMAND IN TRANSLATION STUDIES: A FOCUS **ON SCIENTIFIC AND TECHNICAL TEXTS**

Abstract: This article covers the topics of common problems in translation studies. Also, the current demand of translation studies and its role in society are shown. Today, the rapid development of modern globalization and intercultural relations, the expansion of international relations, the development of trade-economic and financial relations between countries, the strengthening of the process of integration of European countries and the whole world, the development of science and technology, the continuous flow of scientific and technical information Nowadays, the importance of foreign languages as effective factors of organic exchange deserves great attention. In the process of translation of scientific and technical texts, the following requirements should be followed: translation equivalence, translation accuracy, quality of translation data, logicality of translation and quality of its coverage.

Key words: text, translation, lexicon, term, translation problems, transformation (change), information, quality of translation, scientific and technical texts.

Language: English

Citation: Razakova, Sh. D. (2023). Challenges and demand in translation studies: a focus on scientific and technical texts. ISJ Theoretical & Applied Science, 04 (120), 179-182.

Doi: crossef https://dx.doi.org/10.15863/TAS.2023.04.120.34 *Soi*: http://s-o-i.org/1.1/TAS-04-120-34 Scopus ASCC: 3300.

## Introduction

Today, the rapid development of modern globalization and intercultural relations, the expansion of international relations, the development of tradeeconomic and financial relations between countries, the strengthening of the process of integration of European countries and the whole world, the development of science and technology, the continuous flow of scientific and technical information Nowadays, the importance of foreign languages as effective factors of organic exchange deserves great attention. Also, at the stage of economic, scientific, technical and cultural development, a foreign language is widely used as a means of oral and written communication between representatives of different peoples of the world.

Due to the rapid development of knowledge and technologies, translators - specialists who have practical skills in translating scientific and technical texts related to various fields, covering all aspects in today's society and modern economy are changing

conditions. worthy of the need. Therefore, the need for highly educated translators is increasing day by day.

Due to the development of modern technologies, today scientists from different countries of the world have the opportunity to quickly exchange information and conduct joint research, and thanks to these means of communication, unprecedented results are being achieved in modern science. In such conditions, the need for high-quality translation of scientific literature is significantly increasing in many production organizations. Translators must constantly add translations of scientific literature to their vocabulary, increase their ability to understand terms and know their meaning.

Therefore, when translating scientific and technical terms, the translator should first of all pay great attention to the meaning from the existing scientific and technical point of view, and then it is necessary to have the ability to compare with narrow scientific and technical terms [1.10].

In the process of translation of scientific and technical texts, the following requirements should be



	ISRA (India)	= <b>6.317</b>	SIS (USA)	= <b>0.912</b>	ICV (Poland)	= 6.630
Impact Factor:	ISI (Dubai, UAE	) = 1.582	РИНЦ (Russia)	) = <b>3.939</b>	<b>PIF</b> (India)	= 1.940
	<b>GIF</b> (Australia)	= 0.564	ESJI (KZ)	= <b>8.771</b>	<b>IBI</b> (India)	= 4.260
	JIF	= 1.500	SJIF (Morocco)	) = 7.184	OAJI (USA)	= 0.350

followed: translation equivalence, translation accuracy, quality of translation data, logicality of translation and quality of its coverage. In order for a scientific and technical text to have a quality translation, the translator must have the following knowledge and skills:

It is necessary to have knowledge of foreign language theory, phonetics, lexis and grammatical structure of the language;

- Translation of scientific and technical texts to the practice of the skills;

- Linguistic practical knowledge (translation methods, transformation, the ability to replace the equivalent of words, the ability to add words, the ability to describe with terms, etc.);

- In the process of translating the text, it is necessary to have extralinguistic knowledge and ability to use the content of sentences and sentences (in this case, it was required to have sufficient information in translating a special scientifictechnical text)[2.253-259].

One of the main unknown problems in translation is that the translator does not have a complete understanding of what "scientific translation" is. In order to successfully perform scientific translation, the translator must have an idea of how it differs from other types of translation. In general, the translation of the scientific method includes many texts related to the research topic starting from theses, it includes abstracts and reviews of articles, diplomas, dissertations and monograph manuscripts.

- When translating the above types of work, attention should be paid to the following factors: the purpose of translation, the method of translation, the organization of the text in the translation and the relationship between its parts.

- In addition to the external structure of academic texts (chapters, sections, paragraphs), there is also an internal structure. The translation of scientific texts has its own characteristics - it is a method of defining material problems from general information and presenting their solution. For example, English has a number of words and phrases that are used for different purposes, to connect parts of the text together, as well as to move from the meaning of one phrase to another. For example:

- also (in addition, furthermore, furthermore...);

- in spite of (although, however, despite, in spite of, nevertheless...);

- when expressed in other words (in other words);

- for example (for example, for instance...)[3.50-54].

### Terminology problems in translation

It is one of the leading forms of scientific thinking and it is related to the concepts of understanding and perception of meaning. Almost every term in a scientific text is a lexical unit, and it expresses one of the meanings of special lexical units. These lexical units belong to the category of terms.

In general, a term is a word or phrase that is specific to a certain field in the field of science and technology. The term has clear semantic boundaries in linguistics. It follows that terms are a system of concepts reinforced by verbal expressions related to a particular subject. If a word in the common language (except for a term) has many meanings, but it falls into the category of terms, this word will have a specific meaning, and its meaning in the term is used in the translation.

Therefore, one of the main mistakes that a translator makes when translating a scientific text is that he does not have enough skills to use scientific dictionaries or does not have a clear knowledge of the subject specific to the term - this situation is even his own. can also be observed in the mother tongue. In terms of application and quantity, special dictionaries of terms are more widely used in scientific method texts than other types of dictionaries. They are: nomenclature names, professional vocabulary and terms, professional jargon, etc. This lexicon is widely used in all areas of scientific text (that is, text classification, text structure and its function, text components and factors are also taken into account). On average, terminological or terminological vocabulary makes up 20% of the total vocabulary of scientific texts.

### Grammatical problems in translation.

The style of scientific communication has its own grammatical features.

For example, when some texts are translated from English to Uzbek, in some cases the lexical meaning is lost and the verbs have an abstract meaning.

For example:

- It seems very interesting – Bu juda qiziq ko'rinadi.

- He probably **got** a cold – Balki u shamollab qolgan.

- Ali **feels** himself strange – Ali o'zini g'alati his qilayapti.

In these cases, we can see that the semantic load falls on verbs instead of nouns. In other words, verbs perform an important grammatical function in these sentences.

Also, abstract verbs are often used in scientific method texts in English:

- **Many houses were built in short term** – Ko'pgina uylar qisqa mudatda qurilgan;

- Some new planets were discovered in mid of 2000's – 2000-yillarda bir qancha yangi sayyoralar kashf qilingan (topilgan).

As it can be seen in the above examples, abstract nouns are also widely used in English, and the main focus is on verbs, that is, on passive relative verbs.



	ISRA (India)	= <b>6.317</b>	SIS (USA)	<b>= 0.912</b>	ICV (Poland)	= 6.630
Impact Factor:	ISI (Dubai, UAE	) = 1.582	РИНЦ (Russia)	) = <b>3.939</b>	<b>PIF</b> (India)	= 1.940
	<b>GIF</b> (Australia)	= 0.564	ESJI (KZ)	= <b>8.771</b>	IBI (India)	= 4.260
	JIF	= 1.500	SJIF (Morocco	) = 7.184	OAJI (USA)	= 0.350

Another interesting aspect of the research is that in today's linguistics, the percentage of the use of present tense verbs in English is equal to that of past tense verbs, which of course depends on the context of the scientific text.

In general, a scientific text must have a clear statement of logic, and providing a correct and highquality translation of this logic is one of the most important tasks of a translator. Texts in the scientific style often have a homogeneous appearance, and these texts have expressive features. Interrogative sentences are rarely used in such texts, and even if they are used, they are directed to draw the attention of the reader who is familiar with the text. One of the characteristics of scientific texts is that emotional expressions are not used [3.203].

#### General theory of translation.

The general theory of translation systematizes the conclusions derived from the concrete experience of translation and creates a basis for it. During the translation process, the results of the translation and its ideas are summarized, and the conditions and factors specific to the translation are taken into account in the translation activity.

The concept of the general theory of translation was developed by the Russian linguist and linguist A.V. Fedorov's works are widely and fully covered. According to this concept, any quality translation text should begin with a philological analysis of its linguistic basis and end with an artistic creation or scientific editing[4.335].

## A special theory of translation.

The special theory of translation (or research on translation focused on one pair in linguistics) should take into account the equivalents and variants of the correspondence between two languages, as well as the factors and criteria for their selection in a specific situation. Within this theory, the main method of studying translation phenomena is the comparison of two languages. For example: Uzbek and Russian, or Russian and English, or English and German.[12]

Transformational theory of translation

The transformational theory (model) of translation is expressed by making changes to the translated text during the translation activity. The reason is that in some cases the meaning of the text cannot be fully translated or it is difficult to translate. **For example:** 

Not long-ago computers were considered an amazing invention. Today they form part of our everyday lives. The latest thing today is Virtual Reality. A Virtual Reality system can transport the user to exotic locations such as a beach in Hawaii or the inside of the human body.

Uzbek language translation:

O'tgan davrda kompyuterlar ajoyib ixtiro deb hisoblanar edi. Bugungi kunda ular bizning kundalik hayotimizning bir qismini tashkil qiladi. Oxirgi ixtrolardan biri - bu Virtual haqiqat. Virtual haqiqat tizimi foydalanuvchlarni Gavayidagi plyaj yoki inson tanasining ichki qismi kabi ekzotik joylarga olib borish imkoniyatiga ega.

As we can see in the example, the translation from English to Uzbek was not completely translated, but instead underwent a transformation. That is, the meaning of the original text in Uzbek language is clarified with other words.

The transformational model of translation is related to the ideas of "transformative or generative grammar" of the American linguist N. Chomsky. Within this theory, the process of creating a translation text is considered as a syntactic transformation of the units and structures of the source language into the units and structures of the translated language, where great attention is paid to the stages and methods of the translation process. Also, this theory is supported by American translators K. Naide, B.O.[13] It is also mentioned in the works of Kads and V. Koller. In general, the ideas of transformational theory are one of the important methods that allow translation studies to identify the structures and units that are related to each other in the translation process of a pair of languages.

### **References:**

- 1. Fedorov, A.V. (1983) Osnovi obshey teorii perevoda linguisticheskie problemi. 4-e izd., pererab. i dop. (p.10). Moscow: vishaya shcola.
- Solodub, Yu.P. (2005). *Teoriya i praktika xudojestvennogo perevoda*. Uchebnoe posobie dlya studentov lingv.fak.vish.ucheb.zavedeniy. (p.160). Izdatelskiy zentr «Akademiya», 21.
- 3. Arishteyn, V.M (1985) Semanticheskiy mexanizm sjatiya glogol`nix slovosochitaniy/

*pragmaticheskie i semanticheskie aspekty sintaksisa.* Sb.Nauch.tr. Kalininskogo Universiteta. (p.177). Kalinin.

- 4. Veyze, A.A. (1982). Smyslovaya kompressiya teksta v uchebnix celyax. (p.335). Minsk.
- 5. Pumyanskiy, A. L. (1981) Vvedenie v praktiku perevoda nauchnoy i texnicheskoy literature na angliyskiy yazik. 2-e izd. dop. (p.303). Moscow.



<b>Impact Factor:</b>
-----------------------

ISRA (India)	= 6.317	SIS (USA)	= 0.912	ICV (Poland)	= 6.630
ISI (Dubai, UAE)	= 1.582	РИНЦ (Russia)	= 3.939	<b>PIF</b> (India)	= 1.940
<b>GIF</b> (Australia)	= 0.564	ESJI (KZ)	= <b>8.771</b>	IBI (India)	= 4.260
JIF	= 1.500	SJIF (Morocco)	) = <b>7.184</b>	OAJI (USA)	= 0.350

Shimanovskaya, L.A. (2012). Sovremennie 6. teorii perevoda I ix ispolsovanie v rabote s angloyazichnoy nauchnoy statey biotexnologicheskogo profilya. Vestnik Kazanskogo texnologicheskogo universiteta, 253-259.

- 7. Konyayeva, L. A. (2015). O nekonorix trudnostyax nauchno- texnicheskogo perevoda. Perevod I copostavitelnaya lingvistika. Vipusk № 11, 50-54.
- 8. Xomenko, S. A. (2013). Osnovi teorii I praktiki perevoda nauchno- texnicheskogo teksta s angliyskogo yazika na russkiy. (p.203). Minsk: BNTU.
- 9. Fedorov, A.V. (1953). Vvedeniya v teoriyu perevoda. (p.335). Moscow: Izdatelstvo literaturi na inostr.yaz.
- 10. Bebby, A., & Ensinger, D. (2000). PACTE Acquiring Translation Compotence: Hipotheses

and Methodical Problems in a Research Project. (pp.99-100).

- 11. (2018). "Structural and semantic features of Military discourse terminology and its use in translation". Strukturnosemanticheskie osobennosti terminologii voennogo diskursa i eio ispol'zovanie v perevode Problems of modern science and education" nauchnometodicheski zhurnal, № 11[ 131], 53-58.
- 12. Razakova, Sh.D. (2020). Tarjimada paydo bo'ladigan muammolar «Uz Academia" ilmiy jurnalining № 1 soni uchun 31.07.2020.
- 13. (2021). Tarjimada uchraydigan asosiy xatolar. Main errors in translation. Central Asian research journal for interdisciplinary studies (CARJIS) Google Scholar ISSN:2181-2454 Retrieved from www.carjis.org VOLUME 1, ISSUE 4, 2021 Universal Impact Factor(UIF) 2021:7.1, pp.18-23.

