UDC 81'322.4:004.738.5+81'25-051
DOI https://doi.org/10.32782/2522-4077-2024-210-6

MACHINE TRANSLATION *VS* HUMAN TRANSLATION

МАШИННИЙ ПЕРЕКЛАД ПРОТИ ЛЮДСЬКОГО ПЕРЕКЛАДУ

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The article deals with such issues as the history of translation and its definition. The concepts of machine (electronic) and written translation are presented and analyzed. The article examines possible classifications of machine translation, identifies the clearest typology and the advantages and disadvantages of each type of machine translation. It is hard to imagine intercultural communication without the use of translation, but acquiring the skills of a translator requires a lot of time and effort. Therefore, it is difficult to overestimate the importance of studying and solving problems related to machine translation and the importance of its practical application in overcoming the language barrier.

The main issue raised in this article is whether a computer can completely replace a human being. In answering this question, we come to the conclusion that at the current stage of technology development, such a replacement is impossible. Machine translation is not yet capable of fully translating phraseology and slang. The computer does not take into account the peculiarities of the context, the specifics of sentence construction, irony and humour. Only a human can convey all the nuances of language, wordplay, and author's style. In some industries, even the most accurate and correct computer translation needs to be checked by a human multiple times. This applies to the translation of medical subjects, legal documents and texts where the cost of an error can be very high, even to the point of a person's life. The same sad situation is true for the translation of fiction, where, in addition to meaning, it is necessary to convey emotions, expression and imagery. In addition, the style of the work, culture, era, wordplay, and humour must be preserved. Not every professional translator is able to do this. The task of a translator working on a poetic form is even more difficult, as they need to preserve both the meaning and the rhythm, tact, and metaphor.

Key words: machine translation, electronic translation, adequate translation, equivalence, concept, modern technologies, internet.

У статті розглядаються такі питання, як історія перекладу та його визначення. Представлено та проаналізовано поняття машинного (електронного) та письмового перекладу. Розглянуто можливі класифікації машинного перекладу, визначено найбільш чітку типологію, а також переваги та недоліки кожного виду машинного перекладу. Важко уявити міжкультурну комунікацію без використання перекладу, але набуття навичок перекладача вимагає багато часу та зусиль. Тому важко переоцінити важливість вивчення та вирішення проблем, пов'язаних з машинним перекладом, а також важливість його практичного застосування для подолання мовного бар'єру.

Основне питання, яке піднімається в цій статті, полягає в тому, чи може комп'ютер повністю замінити людину. Відповідаючи на це питання, ми приходимо до висновку, що на сучасному етапі розвитку технологій така заміна неможлива. Машинний переклад поки що не здатен повноцінно перекладати фразеологізми та сленг. Комп'ютер не враховує особливості контексту, специфіку побудови речень, іронію та гумор. Тільки людина може передати всі нюанси мови, гру слів, авторський стиль. У деяких галузях навіть найточніший і найправильніший комп'ютерний переклад потребує багаторазової перевірки людиною. Це стосується перекладу медичної тематики, юридичних документів і текстів, де ціна помилки може бути дуже високою, навіть якщо мова йде про життя людини. Така ж сумна ситуація і з перекладом художньої літератури, де, окрім змісту, необхідно передати емоції, експресію та образність. Крім того, необхідно зберегти стиль твору, культуру, епоху, гру слів, гумор. Не кожен професійний перекладач здатен це зробити. Завдання перекладача, який працює з поетичною формою, є ще складнішим, оскільки йому потрібно зберегти не лише зміст, але й ритм, такт, метафору.

Ключові слова: машинний переклад, електронний переклад, адекватний переклад, еквівалентність, концепт, сучасні технології, інтернет.

Statement of the problem. The 21st century is a golden age of change in information and computer technologies. It is difficult to imagine the life of a modern person without various gadgets and technical devices. In the age of information explosion and globalization of all commercial activities the world is in dire need of competent translators. Faced with huge volumes of documents written or translated into an increasingly more and more different languages, people are coming to the conclusion that it is necessary to use machine translation resources. All types of machine translation are inevitably becoming a global industry in this area. However, not all translators are aware of the use of this type of translation, the classification and typology of systemic machine translation, which can lead to inaccuracies and delays in work.

Analysis of recent research and publications. A number of works have been devoted to the problems of machine translation systems, including M. Cheraghi [3], P. Cohen [4], M. Okpor [5], S. Baboryga [6], A. Mishchenko [7], V. Tkachuk [8], N. Franchuk [9], and others. Despite the considerable amount of scientific research on this issue, it should be noted that machine translation systems are in the process of constant development and improvement, therefore, require constant theoretical and practical review, which determines the relevance of our article.

The purpose of the article is to examine the history of translation and its definition, as well as to find out whether electronic translators are more competent and acceptable in terms of translation standards.

Outline of the main material of the study. Modern theories of translation emerged in the 20th century, due to the rapid development of linguistic studies and the emergence of new concepts: structural and descriptive linguistics, transformational and generative grammars. This has allowed us to take a fresh look at the field of study. It should be noted that translation is a process (activity) and the result of creation on the basis of the original (input) text in one language into a communicatively equivalent text in another language (output). In this case, communicative adequacy or equivalence, which is perceived as a qualification of the text being translated, enables it to function in the process of communication of speakers of different languages as a full-fledged substitute for the original text in the sphere of the target language [1].

As an activity, translation is multifaceted and covers various areas of language communication. The emergence of computers and their wide range of applications have facilitated their use in translation, which is based on the principle of replacing characters from one character code with characters from another. Such transcoding occurs due to the existence of certain correspondences between words and grammatical phenomena of different languages. However, despite this, the recoding of sign systems does not provide an adequately equivalent translation result. The need for translation as a type of information activity is increasing every year, so the search for rational ways to solve the problem of fast and large-scale translation. Machine translation can be seen as an alternative to traditional human translation [1].

It should be noted that human translation has certain advantages, such as:

− qualified linguistic expertise: a human translator is able to convey the tone, language structure, style and all the nuances of the source language during the translation without losing the meaning;

− subject matter expertise: only a live translator can have the necessary skills to translate such specialized texts. Machine translation, on the other hand, is much more difficult in this respect, and the final translation can therefore be very different.

− creativity: a human translator will always be able to choose the most appropriate translation based on experience and language skills;

− cultural awareness: when translating into his or her native language, the translator will be able to adapt the text to its cultural peculiarities and even to the target audience, using different styles of the language [2].

With the development of information technology, online translators are increasingly used in everyday life and in the professional sphere. Since the human brain cannot be as fast as a program, this

makes a person more vulnerable, but in our opinion, this is not a disadvantage. After all, speed does not mean quality. Automatic programming cannot reproduce 100% of the equivalence of the essence that the author wanted to express. A human translator can intuitively determine which equivalent may be more appropriate than another, when a machine will only provide the most frequently used words. A human translator also has the opportunity to learn the vocabulary or prepare material on the topic beforehand, for example, translating a popular science text [2].

Mankind has long sought to overcome language barriers. And they have dreamed of doing so in the simplest way possible, that did not require lengthy language learning and that did not require the availability of a special transformer of human speech or text. There were even attempts to invent a universal language that would solve the problem of language barriers, such as the creation of Esperanto by Lazar Zamenhoff in 1887. However, this idea did not become widespread. The development of technology, i.e. the Internet and computers, became a decisive factor in the emergence of machine translation [4].

Let's highlight the main characteristics and peculiarities of machine translation:

1) machine translation is a kind of transformation of texts from one language into another;

2) machine translation is possible with the availability of a suitable intermediary, which is currently a computer, a special computer program or a machine translation system. The development of machine translation is therefore based onthe development of computer science, cybernetics and technology;

3) the quality of machine translation n depends directly on the algorithm used by the electronic translator, i.e. the quality of the software. The better is the quality of the software, the higher is the quality of the resulting translation;

4) machine translation is primarily focused on the translation of text, although there are active developments in speech-stream translation;

5) computer-aided translation is characterized by a high speed of information processing, sometimes at the expense of quality;

6) the use of machine translation implies the total or partial absence of a human translator, thus reducing the human factor to almost nothing, which often plays an important role in the translation of confidential information [5].

Today, there are many applications that facilitate translator's work by providing services for checking and editing documents in accordance with terminology, grammar, punctuation and spelling standards (ORFO, PhatSpell, Termex, TermStar), as well as a large number of electronic dictionaries, such as

Lexibase Collins, Babylon Pro, TranslateIt and translators, such as the widely used Google Translator, DeepL, Microsoft's Bing, Giza++, Moses, Pharaoh, Rewrite, etc.

which help to translate any text [6].

Speaking of machine translation, it is impossible to avoid the issue of neural networks. Today, neural networks have surpassed everything that has been invented in translation over the past 20 years, but they still don't understand the intricacies of historical or traditional translation. Therefore, when translating the English words *king, queen, prince, princes*, the neural network translates these words as *король* or

цар, *королева* or *цариця*, *принц* or *царевич*, *принцеса* or царівна respectively. In English literature, these words are used to refer to both Biblical and ancient rulers (King Solomon, Queen Cleopatra) as well as European monarchs and members of their families (King Richard, King George, Queen Elizabeth, Princess Diana) [8].

Thus, despite the rapid development, none of the existing translation technologies is not able to compete with humans or work completely independently, without the intervention of a specialist, because the task of the translator is to adequately convey the meaning of the message and convey it in a way that is understandable to the recipient. This requires understanding of the context, knowledge

of cultural and religious peculiarities, communication skills and the ability to quickly perceive and analyze the information received. In addition, translation is not only influenced by the verbal component (accent, intonation, mood of the conversation, pronunciation errors), but also by the non-verbal component (gestures and facial expressions). We should not forget metaphorical, homonymous and ambiguous constructions, phrases, slang, idioms, puns and a peculiar sense of humour. It is very difficult to convey all the characteristics and to express all the thoughts, as an ordinary person does, in a living language, unless you "feel" it. For example, the phrase *"вся "сіль" у дрібницях"* was translated by Google Translator as *"all the "salt" is in the little things"*, rather than the expected *"the whole point is"* or *"the thing is"* [8].

If we compare machine translation with human translation, we can see that online translator can only summarize the essence of the source text, but does not guarantee an appropriate and adequate translation Furthermore, the appropriateness of a translation is not only a grammatical aspect, but also a contextual one. The context can only be known by a human being if an electronic translator provides only one translation option, and this may not always be appropriate. The best option for online translation is to translate the whole text rather than sentence-by-sentence, especially if you are translating a scientific and technical text that contains a lot of terminology. Undoubtedly, the majority of errors are caused by the MT system's misunderstanding of the text, as understanding the source text is the primary stage in the translation process, and thus the basis for its correct presentation in another language [9].

The emergence of new technologies still has an impact on the current position of the human translator. Translation quality is the main aspect of text translation, but MT cannot fully reproduce the stylistically and grammatically adequate transmission of the meaning of the source material.

Machine translation is an effective tool for finding and processing information in a foreign language. On the other hand, it is a humanitarian tool that helps to overcome the problem of misunderstanding in international communication. Thus, machine translation systems offer the following advantages, such as efficiency, practicality, accessibility, flexibility, choice, and multifunctionality. A translator software is a tool that allows you to increase the efficiency of a translator's work if used correctly. However, today, no free online translator can deliver 100% quality translation results

Conclusions. We can therefore draw the obvious conclusion that, for a number of the reasons mentioned above, machine translation cannot yet completely replace the profession of translator. Rather, it confirms the following the effectiveness of working in tandem – machine translation together with CAT technologies in the hands of a professional will certainly become an indispensable tool. All a translator has to do is to breathe a little "life" into the text.

So, to summarize the above, we have come to the conclusion that, at the present stage of development of science and technology, there is no satisfactory solution to the problems of the MT system. In order to achieve high quality translation, the MT system requires the intervention of a human translator for pre-editing, post-editing or inter-editing of the text. However, it should be noted that in cases where the translation is carried out for the sake of general understanding of the document's content, MT is a useful tool in the translation.

Our further research includes an in-depth study of existing MT systems in order to identify advantages and disadvantages; to analyze the quality and adequacy of machine translation by different MT systems; practical use of these systems in professional translation activities and everyday life.

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