

*Yablochnikova V. O.,**Assistant Lecturer at the Department of Foreign Philology and Translation  
of Vinnytsia Institute of Trade and Economics  
State University of Trade and Economics**Yasenchuk J. V.,**Assistant Lecturer at the Department of Foreign Philology and Translation  
of Vinnytsia Institute of Trade and Economics  
State University of Trade and Economics*

## THE USE AND CORRECTION OF MACHINE TRANSLATION

**Summary.** In today's interconnected world, the need for successful interlingual communication is more urgent than ever. Machine translation (MT) has become an important technology that allows for the seamless transfer of information across language boundaries. The need to evaluate the quality and reliability of such translations is of particular importance as organizations, academics and individuals increasingly rely on machine translated materials in their professional fields. Therefore, this article explores the complex area of evaluating the adequacy of machine translation of written specialist texts. Due to the large number of online texts in many industries and the global demand for translation, machine translation is becoming increasingly important in the digital age.

The work of a modern translator is impossible without the use of information and communication technologies, especially translation, which is performed mainly by computer tools. Given the breakthroughs made by developers in the field of machine translation, its use is increasingly turning from an auxiliary tool to a necessary one. This state of affairs cannot but affect the professional training of future translators, which should become more and more technologically advanced, and therefore it is important to consider issues related to the modernization of translator training through the introduction of modern translation information and communication technologies in general and machine translation in particular.

Today, machine translation and translation with the help of artificial intelligence has its place in the modern world, despite all the disadvantages mentioned above. Thanks to these types of translation, people who do not speak a particular language can more easily access information in a foreign language by translating it with the help of a machine. Machine translation makes these texts accessible, and that is certainly a good thing. On the other hand, machines have the potential to save time and money. Of course, they are already replacing humans in some contexts, for example, translation agencies are already making extensive use of neural machine translation (and humans are increasingly used as post-editors rather than as pure translators).

**Key words:** machine translation, post-editing, translation competence, electronic translation, adequate translation, equivalence, modern technologies.

**Statement of the problem.** The idea of machine translation, i.e. the idea of entrusting a machine with the job of translating from one natural language to another, has been around for about fifty years. The idea has been around for about the same number of years, research and development work on machine (automatic) translation has been carried out in many countries around the world.

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 [1], P. Cohen [2], M. Okpor [3], S. Baboryga [4], A. Mishchenko [5], V. Tkachuk [6] 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 [7].

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 pro-

vide 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 [7].

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 [8].

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].

On the basis of the above, the following classification is proposed of translation errors:

- 1) semantic errors (distortion of information, incompleteness or redundancy, untranslated fragments, loss of consistency of presentation);

- 2) terminological errors (violation of the unity of the terminology, inconsistency of terms with glossaries, dictionaries, certain industry standards);

- 3) linguistic errors (grammatical, lexical, spelling, punctuation);

- 4) stylistic errors (stylistic inconsistency of the chosen linguistic tools, incoherence of the text, inconsistency of the sentence structure;

- 5) culturally specific errors (irrelevant references to cultural monuments of the target language, incorrect reproduction of ethno-specific concepts, quotations, allusions, etc.)

- 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].

Each type of translation error should, in turn, be assessed on their number and severity. For example, linguistic errors can be evaluated according to the following scheme:

1. The translation demonstrates a mastery of grammar, spelling and punctuation of the target language. A few errors or no errors at all.

2. The translation demonstrates a good command of the grammar, spelling and punctuation of the target language. A small number of minor errors.

3. The translation demonstrates a poor command of the target language grammar, spelling and punctuation. A large number of minor errors.

4. The translation demonstrates a partial lack of skills in grammar, spelling and punctuation of the target language. A large number of errors.

5. The translation demonstrates a complete lack of skills in grammar, spelling and punctuation of the target language. A large number of serious errors.

Translation errors are an objective indicator of translation quality. A good translation should contain few or no errors. The analysis of translation mistakes would be useful in the training of future translators, because if students are able to analyze other people's mistakes, they will begin to analyze their own and develop strategies to avoid them in the future [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 "сіть" 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" [9].

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 [10].

Professional translators have unique knowledge and experience in choosing the most appropriate translation depending on the context, and as well as the knowledge to ensure that the translation is logical and understandable. In addition, professional translators can interact with clients and other professionals to ensure the quality of the translation and take into account the specific needs and requirements of the client.

The evidence that translators are indispensable in their work is numerous translator vacancy announcements. The emergence of this automation has not led to the decline of the profession, but it has changed the way we see translation as a whole. Increased demand for cross-cutting skills and knowledge that enable linguists to produce high-quality translations of texts that machine translators cannot perform with the accuracy required for translation.

J. Morkens offers an interesting analogy with cooking. If we talk about machine translation, it's more like a fast food prepared for consumption in a hurry, without much value in terms of taste and low quality, while human translation is like a meal that is prepared at home, has a unique taste for each housewife, made from quality products and for enjoyment [10]. Each of these products has its own time and its own connoisseur. The main thing is to determine the purpose and consumer of the final product.

Therefore, it is important to understand and objectively assess the risks of using of machine translation, keeping in mind its disadvantages and peculiarities. At the same time, it is important to realise that the emergence of such phenomenon as machine translation or translation with the help of artificial intelligence is already a reality we live in, so there is no point in competing with machines, but we can learn to get along with them, learn how to use them correctly in your translation work, understand the algorithms and principles of their work [10].

**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.

Based on our analysis, we found that machine translation systems have difficulties translating specialized texts. In general, the translations of Google and DeepL machine translation systems were equivalent, with minor differences in the translation of terminology, which Google Translate did slightly better, and grammatical structures, where DeepLTranslate was more effective. Both systems often translate verbatim without taking into account the context, which leads to stylistic errors. Incorrect word choice affects the overall meaning and perception of the text. Grammatical errors lead to incorrect sentence construction in the target language.

In summary, the results of the study show that despite the numerous advantages of machine translation, it often cannot provide reliable translation of specialized materials on its own, making human editing an integral part of the translation process to ensure accurate and contextually relevant translations. The identified shortcomings emphasize the importance of further development of machine translation technology. Thus, the prospect of future research is to further improve machine translation technology to meet the needs of specialized disciplines and ensure that translations are not only accurate but also contextually relevant and stylistically acceptable.

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#### Яблочнікова В., Ясенчук Ю. Використання і корегування машинного перекладу

**Анотація.** У сучасному взаємопов'язаному світі потреба в успішній міжмовній комунікації актуальна як ніколи. Машинний переклад (МП) став важливою технологією, яка дозволяє безперешкодно передавати інформацію через мовні кордони. Необхідність оцінювати якість і надійність таких перекладів набуває особливого значення, оскільки організації, науковці та приватні особи все частіше покладаються на матеріали, перекладені машинним способом, у своїй професійній діяльності. Тому ця стаття досліджує складну сферу оцінювання адекватності машинного перекладу письмових спеціалізованих текстів. Через велику кількість онлайн-текстів у багатьох галузях і глобальний попит на переклад машинний переклад набуває все більшого значення в цифрову епоху.

Робота сучасного перекладача неможлива без використання інформаційно-комунікаційних технологій, особливо це стосується перекладу, який виконується переважно за допомогою комп'ютерних засобів. З огляду на прориви, досягнуті розробниками в галузі машинного перекладу, його використання все частіше перетворюється з допоміжного інструменту на необхідний. Такий стан речей не може не впливати на професійну підготовку майбутніх перекладачів, яка повинна ставати все більш технологічною, а тому важливо розглянути питання, пов'язані з модернізацією підготовки перекладачів шляхом впровадження сучасних перекладацьких інформаційно-комунікаційних технологій загалом і машинного перекладу зокрема.

Сьогодні машинний переклад і переклад за допомогою штучного інтелекту мають своє місце в сучасному світі, незважаючи на всі недоліки, згадані вище. Завдяки цим видам перекладу люди, які не володіють певною мовою, можуть легше отримати доступ до інформації іноземною мовою, переклавши її за допомогою машини. Машинний переклад робить ці тексти доступними, і це, безумовно, добре. З іншого боку, машини мають потенціал для економії часу та грошей. Звичайно, вони вже замінюють людей у деяких контекстах, наприклад, бюро перекладів вже широко використовують нейронний машинний переклад (а люди все частіше використовуються як постредактори, а не як чисті перекладачі).

**Ключові слова:** машинний переклад, постредагування, перекладацька компетенція, електронний переклад, адекватний переклад, еквівалентність, сучасні технології.