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FEATURES AND PERSPECTIVES OF MACHINE NEURAL TRANSLATION

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Since the beginning of globalization and the rapid development of international communication, the profession of a translator has been in demand.

In today's reality, translators need to work with a great number of text documents. In addition to the eager development of globalization in all spheres of the social life, artificial intelligence is also gaining tremendous role. There is no denying the demand for AI in many industries, as the use of such technologies can make many processes easier and faster. That is why translators need to master AI mechanisms in the translation activity.

Many translation professionals are interested and even excited about the prospect of working with AI. Artificial intelligence is a powerful tool that humans have created. However, there is a risk that AI will not always be a subject to the human control. Many students are using AI in their studies to complete certain tasks. In order for AI to really help humans in learning and working, we need to understand how AI works, what capabilities it has, what are the pros and cons.

The purpose of our study is to investigate the characteristics of the use of emerging technologies in the translation process from an assistive power perspective.

The technical aids of the interpreter include:

- professional electronic dictionaries (Multitran, ABBY lingvo, etc.);
- machine (automatic) translation, i.e. computer-aided conversion of a text in one natural language into an equivalent text in another language, as well as the result of such conversion [4].

In addition, the machine translation is divided into several types: Rule-Based Machine Translation (RBMT), Statistical Machine Translation (SMT) and hybrid systems combining the features of the first two groups. However, in the context of this topic, we will take the fourth type - neural machine translation.

Neural networks, a computer program that works on the principle of a natural neural network in the brain, are gaining popularity. The task of such artificial neural networks is to perform cognitive functions such as problem solving and machine learning [3].

The modern machine neural translation (hereinafter referred to as MNT) has several features:

- 1) Contextual understanding. Neural networks are able to take into account the context of sentences of bilingual corpora. The MNT uses a variety of methods

and technologies to achieve its goals. The most effective and widely used method is neural networks. Neural networks model complex linguistic structures, taking into account the context of translation.

2) Adaptation to text. MNT systems are capable of learning from different stylistic features of language, which makes them more flexible than other categories of MTs.

The norms of the stylistic genre of one language do not always coincide with the norms of another language. When some peculiarities are detected in one language, when translating into another language, the linguistic means of the original language are replaced by the linguistic means of the language into which the translation is made, so that the completed text can meet the requirements of the necessary style in the target language. This process is called stylistic adaptation: it refers to possible stylistic modifications. Adaptation can also take place at other levels: lexical and grammatical.

3) Multilingualism. MNT systems are capable of handling multiple languages simultaneously, which makes them convenient for multilingual translations. This certainly allows the translator to save time and complete much work.

4) Versatility. MNT has been successfully used in a variety of applications, including online translation systems, voice assistants, and other information sharing tools.

MNT finds the application in various fields of activity: translation services and various translation applications, business, tourism, hospitality, research and conferences.

5) Self-development. MNT works on the principle of the nervous system of living organisms. This principle allows you to deviate from the usual algorithm of actions and find an alternative solution to the problem.

Modern MNT use neural networks to improve translation quality. Neural networks are trained on large amounts of parallel text, which helps to capture the complex linguistic relationships between words and phrases in the text. This helps to produce the most accurate and natural translation. The principle of MNT is based on analyzing statistical data, rules, and grammar of the language.

With the entrenchment of MNTs in our daily lives, a new, as yet unestablished competency in the translation industry has emerged - machine translation post-editing, where the translator corrects MNT errors and edits the raw text to achieve the expected result with the help of AI.

Let's look at the benefits of using AI in translation activity:

1) The speed: the system processes large amounts of text much faster than a human.

2) The instant access to electronic resources and accuracy: AI quickly finds translations of unfamiliar words and expressions, makes minimal grammatical, lexical, spelling and punctuation errors.

3) The risk reduction of a "creative crisis": AI is able to suggest a synonymous version of the text while maintaining the accuracy of the translation.

In the translation process, a translator who uses AI needs to follow rules to get a quality translation:

- accuracy and uniformity of terminology translation. It is necessary to control the translation of terminology so that the reader does not have difficulties in understanding the variety of synonyms provided by the AI.
- targeting the readers' audience. The same term can be translated differently in different spheres, which is why it is necessary for the translator to use reliable sources and check whether the meaning of the term is correctly transferred from one language to another.

So, MNT – is an assistant interpreter that needs to be supervised for a number of reasons:

1) AI makes mistakes: when artificially translating, the system may choose not the most accurate translation, missing the meaning of the original. The translator needs to check that the text is faithfully rendered while preserving the author's idea.

2) AI translates "literally": AI does not always understand the meaning of a word or phrase in the cultural context of both the source and target language; language tropes can be taken literally by the system and produce an erroneous translation.

3) AI may make grammatical, lexical, spelling and punctuation errors when translating.

4) AI does not take into account the characteristics of the target audience.

No doubt, MNT is a technology that enables automatic translation in different languages. Machine translation has advantages: speed and accessibility; and disadvantages: lack of full translation accuracy and incomplete understanding of the context. The modern world can no longer be imagined without TPL, as it is used in various areas of life, such as education, tourism and commerce.

In our opinion, MNT can be of great help in the translation process and is worth exploring, as AI is not going to replace the translator anytime soon. There are quite a few aspects of the translation craft that artificial intelligence cannot understand. AI analyzes the text, performs the task of translation, applying the inherent knowledge of grammar and vocabulary of the language, and translation algorithms. But AI does not always produce an accurate translation, because the translation process is not just a translation of words, but also a translation of the meaning and culture of the translated text from one language to another language, which has its own cultural peculiarities.

Although cultural knowledge can be embedded in the AI system, the translator needs to check the artificially produced translation, adjust the final version depending on the preferences of the target audience.

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