



HUMAN VS. MACHINE TRANSLATION: A COMPARATIVE LINGUISTIC ANALYSIS

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The article discusses the differences between human and machine translation. The main aim of the work is to compare how a person and a translation program translate texts and to see which one gives a more accurate and natural result. In this research, several texts from different genres were chosen, and their human and machine-translated versions were analyzed and compared. The results show that machine translation is fast and works quite well with simple and technical texts. However, it often makes mistakes when translating idioms, cultural expressions, and sentences with hidden meaning. Human translation, in contrast, sounds more natural and better reflects the context and style of the original text. The study shows that even though technology is developing quickly, human translators still play an important role in producing high-quality translations.

In recent years, machine translation has become very common in everyday life. Many students, including me, use online translators when working with foreign texts. It is fast, simple, at the same time, professional translators still play an important role in translating books, articles, films, and official documents¹. Because of this, the question appears: can machine translation really replace human translation, or does it only help it? From my point of view, translation is not only about changing words from one language into another. It is also about understanding meaning, context, culture, and even emotions. A human translator can analyze the situation, think about the audience, and choose the most suitable words.

Machine translation works differently. It uses programs and large databases to produce a result, but it does not truly "understand" the text. When comparing human and machine translation, the first significant difference can be observed at the lexical level. Machine translation systems typically select the most statistically frequent meaning of a word. In texts where terminology is clear and unambiguous, this approach can be effective.

For example, in a biological context, the word "cell" is correctly translated by machine systems as "клетка." In such cases, contextual ambiguity is minimal, and the output is generally accurate. However, lexical ambiguity presents serious challenges. The English word "bank" may refer either to a financial institution or to the side of a river. In the sentence "He sat on the bank and watched the water," a machine translation system might produce "Он сидел в банке...", which distorts the intended meaning.

A human translator, by contrast, interprets the situational context and correctly renders the sentence as: "Он сидел на берегу и смотрел на воду."

¹Baker M. In Other Words: A Coursebook on Translation. London: Routledge. 2008, pp. 34-36.



This example demonstrates that human translators rely not only on dictionary meanings but also on contextual analysis.

Another important distinction appears at the grammatical and syntactic levels. Machine translation often preserves the structure of the source language too rigidly. As a result, the translated text may sound unnatural or stylistically awkward.

For example, the English sentence:

"Having finished the project, the team decided to celebrate."

A machine translation might produce:

"Закончив проект, команда решила отпраздновать."

Although grammatically correct, in more complex contexts machines sometimes misinterpret participial constructions, especially in longer sentences.

Consider a more complex example:

"The results obtained during the experiment, which was conducted over a period of six months, demonstrate significant improvement."

Machine translation may create a sentence with overloaded structure and unnatural word order.

A human translator would adapt the structure for clarity:

"Результаты эксперимента, который проводился в течение шести месяцев, показали значительное улучшение."

Human translators can reorganize sentence elements, divide long sentences, or combine short ones to ensure fluency and readability in the target language.

Conclusion

The comparison of human and machine translation shows that they serve different purposes in modern communication. Machine translation is efficient and practical, especially when the goal is to understand the general content of a text quickly. It performs well in technical and informational materials where terminology is clear and structures are predictable. At the same time, the analysis highlights clear limitations of automated systems.

Machine translation struggles with ambiguity, idiomatic language, stylistic nuances, and cultural references. Even when the grammar appears correct, the result may lack natural flow or fail to convey the intended tone and meaning. Human translation, on the other hand, involves interpretation rather than mechanical substitution of words. A translator evaluates context, considers the audience, and makes conscious decisions to preserve meaning, style, and communicative effect. This interpretative dimension is essential in texts that require cultural sensitivity, creativity, or emotional depth.

Therefore, machine translation can be viewed as a useful technological resource that supports communication, but it does not eliminate the need for professional human translators. The quality and adequacy of complex translations still depend on human judgment and linguistic competence.

References:

1. Baker M. In Other Words: A Coursebook on Translation. London: Routledge, 2018.



2. Baker M. Corpus-Based Translation Studies: Theory and Practice. London: Routledge, 2011.
3. Catford J. C. A Linguistic Theory of Translation. London: Oxford University Press, 1965.
4. Garcia I.; Peña, M. Machine Translation and Human Translation: Comparative Studies. 2018.
5. Harrison M. Stylistic Devices in Literary Translation. 2010.
6. House J. Translation Quality Assessment: Past and Present. London: Routledge, 2015.
7. Newmark P. A Textbook of Translation. London: Prentice Hall, 2009.
8. Nida E. A.; Taber, C. R. The Theory and Practice of Translation. Leiden: Brill, 1969.