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THE PECULARITIES OF ARTIFICIAL INTELEGENCE AND HUMAN TRANSLATION

Raimov Lazizjon Alisherovich
Termez economics and service university lazizjon_raimov@tues.uz

ABSTRACT

The process of translation has always supported human communication by crossing the gap between languages and cultures. Artificial Intelligence (AI) is a new paradigm that revolutionized multiple sectors and this has specifically affected text machine translation, decreasing or eliminating human involvement. As a result, translation software models based on artificial intelligence (AI) are now widely accessible. This article examines distinct aspects and comparative advantages of AI and human translation through an analysis of their approaches, abilities, drawbacks and chances for collaboration. Thus, the study compared AI and human translation, looking at their respective advantages and disadvantages as well as the circumstances in which they would work best. It did this by employing a contrastive methodology.

Keywords: Artificial intelligence, Translation software, Machine translation, Human translation

Translating involves changing words or speech from one language to another while preserving the message and subtleties. In the past people used to do this by relying on their grasp of language intricacies and cultural backgrounds. However as AI, machine learning and neural networks has advanced AI powered translation tools have grown more advanced and widespread. This piece explores the differences, between AI and human translation emphasizing their characteristics and possible synergies. Technology has a significant influence on and direction on modern lives. This includes a wide range of advanced artificial intelligence (AI) applications, some of which are more capable than humans at performing different operational and bureaucratic jobs. But because of the same superiority of human cognition that has always guaranteed human domination in the natural world, humans continue to thrive in jobs requiring brain and thought.

Though opinions on this matter range from those who believe AI will help human growth to others who believe it will cause several problems in the future, there has been a growing discussion in recent years over how the development of artificial intelligence may effect human existence. The first group, which includes Mark Zuckerberg, the founder of Facebook, thinks that advances in AI would benefit people in a variety of ways, while the opposing viewpoint holds that advances in AI could lead to a collapse in society and even in humankind. For example, Steven P. Koenig voiced concerns about artificial intelligence (AI) advances and the possibility of replacing humans, even though he did not totally rule out the possibility that additional research could lead to the emergence of new forms of life.

Research on the electric field effect in ultrathin black phosphorus has been one of Koenig's notable contributions to the field of artificial intelligence (AI), as a scientist at the Institute for Materials Research and Engineering (IMRE) [2]. Thus, the work of these individuals highlights the growing influence of AI on various aspects of human life, demonstrating that AI is no longer only a technological advancement but rather a transformative process that is reshaping lives and communities.

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Federspiel et al. [3] pointed out that artificial intelligence is profoundly and progressively changing human lives. Because of its effects on a number of social, political, economic, and security-related health variables, it has thus been recognized as a possible threat to human health and well-being. Without a doubt, artificial intelligence is changing the human world, so it's critical to make sure this change is for the better.

Business translation systems, according to Choudhury and McConnell [5], still have difficulty striking a balance between cost, quality, and speed to market. Thus, machine translation (MT) as well as collaborative model construction and problem solving with the help of the internet community are becoming more common in instances like these.

Thus, the goal of the current study is to compare documents translated by AI systems with those translated by people. As a result, the study examined how AI is affecting the translation industry by evaluating its ability to generate writings that are similar to those translated by humans.

Because of the continuing second industrial revolution, artificial intelligence (AI) has become a topic of discussion in academic institutions, the media, and different political arenas. As a result, debate and research around AI in recent years have affected a number of fields, including politics, business, journalism, and academia. Because this multidisciplinary field is at the forefront of technological advancement, impacting a wide range of industries and changing how people perceive the world, it is crucial that researchers rigorously explore and critically analyze artificial intelligence (AI) in a variety of contexts.

While Fetzer [7] describes artificial intelligence more broadly as having its origins and creation method in human invention and ingenuity, thereby distinguishing artificially intelligent things from naturally intelligent things, Ramesh et al. [6] argue that the development of robots can be seen as the beginning of AI development. The drama "R.U. R" (Rossum's Universal Robots) from 1921 is sometimes credited with popularizing the term "robota" (robota in Czech), which describes a factory that uses bioengineered machines to perform forced labor.

The term "robot" was subsequently solidified in the mid-1900s common consciousness by Isaac Asimov, who employed it often in his numerous brief pieces of modern science fiction. There are numerous components to developing intelligent technology that can replicate human abilities to perform jobs typically performed by people.

Russell [8] asserts that for artificial intelligence to be successful, it must possess both intelligence and the quality of being a sound artifact. Computers have frequently been used to mimic human behavior because of the latter. Nonetheless, McCarthy [9] defines artificial intelligence as the science of creating intelligent technology in a broader sense. Thus, while it is associated with the use of computers to develop an understanding of human intellect, AI need not be restricted to methods that can be physically observed.

Artificial intelligence has advanced significantly as a result of both natural languages and programming. Russell [8] asserts that the combination of computational linguistics and natural language processing can create a hybrid discipline that bridges the gap between artificial intelligence research and traditional linguistics. Though this was not widely acknowledged until the 1960s, understanding the subject and context is thus considered as crucial for both language comprehension and comprehending sentences generated by artificial intelligence.

However, a large portion of the early research in knowledge visualisation—the study of how to represent information in a way that a computer can understand—was driven by linguistics

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studies, which are in turn connected to decades of work on the philosophical analysis of language [8].

Nowadays, a great deal of people communicate across language barriers by using smartphones and online machine translation software, which helps to close the gaps between different cultures and linguistic systems. AI translation mostly deals with machine translation (MT) systems. Initially MT systems such, as rule based and statistical models have developed into machine translation (NMT) systems. NMT utilizes deep learning methods to understand the connections between words and phrases in languages. These systems are educated using text data allowing them to forecast translations with great precision. AI translation tools, like Google Translate and DeepL utilize NMT consistently enhancing their knowledge from user feedback and adjustments. According to Yang [10], the emergence of artificial intelligence translation has been attributed to the development of automated translation tools. This has led to the emergence of new scenarios in machine translation apps that aim to provide greater equivalency to human translators. Nevertheless, critics contend that there remains a significant performance gap between the two processes [11, 12].

The majority of machine translation research to date, according to Majumde et al. [13], has focused on translating and evaluating sentences alone, ignoring the context in which they occur. Therefore, improving the translation process can have a number of benefits, such as making data set generation easier, creating computational models that are more effective, and facilitating human evaluation more quickly. Specifically, without context, human evaluation is unable to identify all translation errors, which could cause problems with early claims of equality with humans. O'Hagan [14] pointed out that common Internet users might need translation, just as government agencies and businesses interacting with international populations in a technical setting might. Consequently, free online translation tools that rely on automatic translation—officially known as "machine translation" or "MT"—like Google Translate and Microsoft Bing Translator, have become increasingly popular. Thus, these technologies frequently satisfy the need for translation that arises from internet users who do not believe that professional translation services are required and who prioritize speed, cost, and convenience over quality. Yet there are several drawbacks of AI translation. For instance, Contextual Understanding Challenges; AI might find it difficult to grasp context accurately resulting in translations that overlook idiomatic subtleties. Inconsistent Translation Quality; The quality of AI translations may fluctuate, particularly when dealing with spoken languages or intricate texts. Ethical Considerations; There are dilemmas surrounding the use of AI in translation covering issues, like data privacy and the risk of displacing translators from their jobs.

The translation industry has remained relatively dispersed and variable in its degree of sophistication regarding the use of such technologies, but computer-aided translation (CAT) has become common in commercial translation production, and software solutions continue to dynamically change social communication in translation [15].

According to Diaz [16], OpenAI's ChatGPT robot, which was developed using artificial intelligence, was made available in November 2022. Although this was first based on OpenAI's GPT-3 series of large language models, it has since been enhanced through the use of both supervised and reinforcement learning techniques. It was developed especially for use in conversational applications, such as messaging apps and chatbots. It is based on a GPT-3.5 series model that finished training in early 2022.

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New developments have resulted in the creation of GPT-4, the most recent phase of OpenAI's deep learning scaling project. GPT-4 is a large multimodal model that can output text and receive visual inputs. Based on the application of academic and professional benchmarks, GPT-4 performs at a human level on a variety of activities, despite being less successful than humans in many real-world circumstances.

CONCLUSIONS

There are two distinct methods for translating text from one language to another: machine translation, or AI translation, and human translation. A individual who is proficient in both the source and destination languages and has a deep understanding of the text's intricacies and cultural context should translate texts by hand. On the other hand, AI translation is carried out by a computer program that translates the text using algorithms and a lot of data. Artificial intelligence (AI) translation can be quicker and less expensive than human translation, but it might not always be able to effectively convey the complexities and cultural quirks of the original material.

Although artificial intelligence translation has advanced significantly in recent years and offers quick and affordable solutions, it still has a lot of drawbacks. Human translation, on the other hand, is a better option for translations requiring a high degree of accuracy and cultural sensitivity because a skilled human translator can accurately convey the intended meaning and tone of the original text. This results in a deeper understanding of the cultural context and subtleties of the translated text.

AI translation can be quick and economical, but it might not always be able to convey the complexities and cultural quirks of the text as well as a human translator because it depends on algorithms and a lot of data to translate language. Furthermore, metaphors, idioms, and other language-specific elements that a human translator is likely to comprehend and interpret correctly may be difficult for AI translation to translate.

Although artificial intelligence (AI) translation offers certain benefits, human translation might be deemed to offer superior quality translation because of its enhanced capacity to precisely represent the intended meaning and cultural context of the source text.

REFERENCES.

1. Потебня А. А. Из записок по русской грамматике: Том I—II / Общ. ред., предисл. и вступ. статья проф. д-ра филол. наук В. И. Борковского; Академия наук СССР, Отделение литературы и языка. — Москва: Государственное учебно-педагогическое издательство Министерства просвещения РСФСР (Учпедгиз), 1958. — 536 с.

2. Rakhmonkulova Yokutkhon Tukhtasin kizi. (2024). Philosophy of second language teaching. "XXI asrda innovatsion texnologiyalar, fan va ta’lim taraqqiyotidagi dolzarb muammolar" Nomli Respublika Ilmiy-Amaliy Konferensiyasi, *2*(2), 54–58.

3. Raimov Lazizjon Alisherovich. (2023). Lexical-semantic and structural analysis of construction terminology: on the material of the uzbek and english languages. World Bulletin of Social Sciences, *22*, 72-76.

4. Allayev Zafar. (2024). Development of oneirosphere in traditional china. "xxi asrda innovatsion texnologiyalar, fan va ta’lim taraqqiyotidagi dolzarb muammolar" Nomli Respublika Ilmiy-Amaliy Konferensiyasi, 2(2), 59–63

5. To‘rayeva, U. (2023). The oretical and practical basis of translation of terms. Scientific Journal of the Fergana State University, 29(4), 64. https://doi.org/10.56292/SJFSU/vol29_iss4/a64

ISSN: 2582-4686 SJIF 2021-3.261,SJIF 2022-2.889,
2024-6.875 ResearchBib IF: 8.848 / 2024

6. Виноградов. В. В. Основные проблемы изучения образования и развития древнерусского литературного языка. — Москва, 1958.

7. Бахтин М. М. Эстетика словесного творчества / Походаев В. С.. — Москва: Искусство, 1986. - 445. - 258 с.

8. Москальская О.И. Теоретическая грамматика современного немецкого языка. Учебник для студ. высш. учеб. заведений. — Москва: Академия, 2004. - 352 с.