

SCI-CONF.COM.UA

MODERN RESEARCH IN SCIENCE AND EDUCATION



**PROCEEDINGS OF VI INTERNATIONAL
SCIENTIFIC AND PRACTICAL CONFERENCE
FEBRUARY 8-10, 2024**

**CHICAGO
2024**

MODERN RESEARCH IN SCIENCE AND EDUCATION

Proceedings of VI International Scientific and Practical Conference

Chicago, USA

8-10 February 2024

Chicago, USA

2024

UDC 001.1

The 6th International scientific and practical conference “Modern research in science and education” (February 8-10, 2024) BoScience Publisher, Chicago, USA. 2024. 548 p.

ISBN 978-1-73981-123-5

The recommended citation for this publication is:

Ivanov I. Analysis of the phaunistic composition of Ukraine // Modern research in science and education. Proceedings of the 6th International scientific and practical conference. BoScience Publisher. Chicago, USA. 2024. Pp. 21-27. <https://sci-conf.com.ua/vi-mizhnarodna-naukovo-praktichna-konferentsiya-modern-research-in-science-and-education-8-10-02-2024-chikago-ssha-arhiv/>.

Editor

Komarytskyy M.L.

Ph.D. in Economics, Associate Professor

Collection of scientific articles published is the scientific and practical publication, which contains scientific articles of students, graduate students, Candidates and Doctors of Sciences, research workers and practitioners from Europe, Ukraine and from neighbouring countries and beyond. The articles contain the study, reflecting the processes and changes in the structure of modern science. The collection of scientific articles is for students, postgraduate students, doctoral candidates, teachers, researchers, practitioners and people interested in the trends of modern science development.

e-mail: chicago@sci-conf.com.ua

homepage: <https://sci-conf.com.ua>

©2024 Scientific Publishing Center “Sci-conf.com.ua” ®

©2024 BoScience Publisher ®

©2024 Authors of the articles

59. *Поцулко О. А.* 348
МАРІЯ МАГДАЛИНА МАЗЕПИНА – «СІРИЙ КАРДИНАЛ»
ГЕТЬМАНА ІВАНА МАЗЕПИ (ДО 400-РІЧЧЯ З ДНЯ
НАРОДЖЕННЯ)

CULTUROLOGY

60. *Козловська М. В.* 359
ДОСЛІДЖЕННЯ ФЕСТИВАЛЬНИХ ПРАКТИК У СУЧАСНОМУ
НАУКОВОМУ ВИМІРІ
61. *Луценко О. А.* 364
ЛЮДИНА В КОНТЕКСТІ ДИХОТОМІЇ СХІД–ЗАХІД:
ІСТОРИКО-КУЛЬТУРОЛОГІЧНИЙ АСПЕКТ
62. *Щербатюк Е. Т.* 377
РОЛЬ ХОРЕОГРАФІЇ У ФОРМУВАННІ ТА ЗБЕРЕЖЕННІ
УКРАЇНСЬКОЇ КУЛЬТУРНОЇ ІДЕНТИЧНОСТІ

LITERATURE

63. *Чикур Л. Д.* 385
ЛІТЕРАТУРНО-КРИТИЧНА ДІЯЛЬНІСТЬ М. КОСТОМАРОВА
ЯК ДЖЕРЕЛО ДОСЛІДЖЕНЬ ЕТНОКУЛЬТУРНОЇ
САМОБУТНОСТІ УКРАЇНЦІВ

POLITICAL SCIENCES

64. *Ghudushauri Aluda* 388
MODERN TENDENCIES OF LIBERALISM
65. *Дикул Д. О.* 395
ВПЛИВ ПЕРЕМОГИ УЛЬТРАПРАВИХ В ІТАЛІЇ НА СУЧАСНІ
ПРАВораДИКАЛЬНІ РУХИ ЄВРОПЕЙСЬКОГО СОЮЗУ
66. *Красников Є. В.* 400
УПРАВЛІННЯ КУЛЬТУРНИМИ ЗМІНАМИ

PHILOLOGICAL SCIENCES

67. *Ihnatenko V.* 406
ARTIFICIAL INTELLIGENCE AND TRANSLATION: CURRENT
REALITIES AND PECULIARITIES
68. *Mammadova Konul* 410
USE OF NEW TEACHING METHODS IN TEACHING LANGUAGE
RULES IN THE AZERBAIJANI LANGUAGE LESSONS IN
PRIMARY GRADES
69. *Lasyinska T. A.* 415
METHODS OF ACHIEVING ARCHAIZATION IN THE
TRANSLATION OF HISTORICALLY MARKED VOCABULARY

PHILOLOGICAL SCIENCES

УДК 81`2

ARTIFICIAL INTELLIGENCE AND TRANSLATION: CURRENT REALITIES AND PECULIARITIES

Ihnatenko Viktoriia,

PhD of Pedagogical Sciences, Associate Professor,
Bila Tserkva National Agrarian University
Bila Tserkva, Ukraine

Abstract. The research paper discusses the place of artificial intelligence in the modern activity of a translator and compare it to human translation. It focuses on the advantages and disadvantages of artificial intelligence comparing to neural machine translation.

Keywords: translator, artificial intelligence, neural machine translation, human translation.

Machine translation has been developing rapidly in recent years. Millions of people use it today in online translation systems and mobile applications to communicate across language barriers. The question naturally arises as to whether such systems can come close to or achieve parity with human translation.

First, we need to understand what machine translation is considered to be and what we are comparing it to. It's important to note that we consider human translation to be the starting point and the benchmark. We contrast and compare this traditional type of human translation with machine translation.

This research paper will focus on the role of machine translation in translation activities, whether its results can somehow surpass the work of a human translator, and consider its disadvantages and advantages. In particular, let's focus on what

artificial intelligence is in the work of a translator (ChatGPT).

ChatGPT (Generative Pre-trained Transformer) is an artificial intelligence chatbot developed by OpenAI. It is a large statistical model of language optimised for dialogues and trained using supervised and reinforcement learning techniques. This chatbot can handle various tasks, including translation.

ChatGPT can help translators in a variety of ways. Here are some examples:

- Providing accurate and relevant translations of words and phrases. It can use its understanding of grammar, vocabulary, and syntax to ensure translation accuracy;
- Helping you choose the most appropriate translation. Sometimes a word or phrase can have several meanings or translations, and ChatGPT can help you find the most appropriate one depending on the context;
- recommendations on the appropriate use of terms and phrases. ChatGPT can help translators find the correct term or phrase used in a particular industry or context;
- search for a suitable equivalent for terms or expressions that do not have a direct analogue in the target language. Sometimes, some terms or expressions do not have a direct equivalent in the target language, and ChatGPT can help find the most appropriate equivalent for such cases.

An interesting feature of translation with ChatGPT is the ability to construct prompts, which is the process of structuring text that can be interpreted and understood by the generating AI model. A prompt is a text in natural language that describes a task that an artificial intelligence should perform. The construction of prompts is made possible by in-context learning, defined as the ability of a model to learn temporarily from prompts. The ability to learn in context is an emergent ability of large language models. Context learning itself is an emergent property of the model scale, which means that there are breaks in the laws of further scaling, so that its effectiveness grows at a different rate in larger models than in smaller ones. This option allows you to put the original text into a certain context, i.e. to set some initial data, which is impossible to do with neural network translators such as Google,

DeepL, etc.

In general, ChatGPT can help translators provide accurate, clear and contextually appropriate translation that meets their needs. For example, you can provide a prompt: "Translate the text as if it were for preschool children", or "Translate the text with a female audience in mind", etc. In fact, this is a unique opportunity for the system to take into account the peculiarities of extra-textual reality, to take into account the broader extra-linguistic context, which is in some ways revolutionary in machine translation and raises machine translation to a higher level compared to neural networks.

A. Pym, comparing machines and humans, points out that among the disadvantages of machines is their inability to compare the risks of making mistakes in form and content, for example, the machine does not care whether it is translating an important document or just a cooking note, so it does not know the cost of an error. The machine operates out of context and is unable to assess the mood or extra-linguistic message of the text, and it does not guarantee confidentiality, which is highly valued in the market today among customer companies.

Professional translators have unique knowledge and experience in selecting the most appropriate translation for the context, as well as the knowledge to help ensure that the translation is logical and understandable. In addition, professional translators can interact with clients and other professionals to ensure that the translation is of the appropriate quality and that the client's specific needs and requirements are taken into account.

The fact that translators are indispensable in their work is evidenced by the numerous translator job postings. The emergence of this automation effect has not led to the decline of the profession, but it has changed the perspective of translation in general. There is a growing demand for "end-to-end skills and knowledge - skills that enable linguists to produce high-quality translations of texts that machine translators cannot produce with the accuracy required for translation".

Today, machine translation and AI-assisted translation also have their place in the modern world, despite all the above disadvantages. Thanks to these types of

translation, it is easier and simpler for people who do not speak a particular language to access information in a foreign language by translating it with the help of a machine. Machine translation makes these texts accessible, and this is certainly a good thing. On the other hand, machines have the potential to reduce time and costs, and 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 stepping in as post-editors rather than pure translators).

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

REFERENCES:

1. Anthony Pym. AI and the future of translation. In search of evidence, 2023. YouTube. URL: <https://www.youtube.com/watch?v=46rUOOmNlkA> (date of access: 25.01.2024).
2. Borgonovi, Francesca, Hervé, Justine, and Seitz, Helke. 2023. “Not lost in translation: The implications of machine translation technologies for language professionals and for broader society”. OECD Social, Employment and Migration Working Papers No. 291
3. Chat GPT. Wikipedia URL: <https://uk.wikipedia.org/wiki/ChatGPT> (Date of access: 15.01.2024)
4. Koponen, M. (2016). Is machine translation post-editing worth the effort? A survey of research into post-editing and effort. *The Journal of Specialised Translation*, 25(2).