



МІНІСТЕРСТВО ОСВІТИ І НАУКИ УКРАЇНИ  
МАРИУПОЛЬСЬКИЙ ДЕРЖАВНИЙ УНІВЕРСИТЕТ

# **АКТУАЛЬНІ ПРОБЛЕМИ ОСВІТИ ТА НАУКИ**

**Збірник матеріалів**

**XXVII підсумкової науково-практичної  
конференції викладачів**

20 лютого 2025 року

Київ 2025

УДК 061.3(063)

АКТУАЛЬНІ ПРОБЛЕМИ НАУКИ ТА ОСВІТИ: Збірник матеріалів XXVII підсумкової науково-практичної конференції викладачів МДУ / За заг. ред. М.В. Трофименка. Київ: МДУ, 2025. 385 с.

Рекомендовано до друку та поширення через мережу Інтернет вченою радою Маріупольського державного університету (протокол № 7 від 26.02.2025)

**Редакційна колегія:**

*Голова* Трофименко М.В., ректор МДУ, доктор політичних наук, професор;

*Члени редколегії* Безчотнікова С.В., доктор філологічних наук, професор;  
Задорожня-Княгницька Л.В., доктор педагогічних наук, професор;  
Іванець Т. М., голова Ради молодих вчених МДУ, кандидат політичних наук, доцент;  
Калініна С. П., доктор економічних наук, професор;  
Константинова Ю. В., кандидат історичних наук, доцент;  
Марена Т.В., кандидат економічних наук, доцент, проректор з науково-педагогічної роботи;  
Мельничук І. В., кандидат філологічних наук, доцент;  
Омельченко В.Я., доктор економічних наук, професор;  
Павленко О.Г., доктор філологічних наук, професор;  
Пирлік Н. В., кандидат філологічних наук, доцент;  
Романцов В.М., доктор історичних наук, професор;  
Сабадаш Ю. С., доктор культурології, професор;  
Тарасенко Д. Л., доктор економічних наук, професор.

Збірник містить матеріали XXVII підсумкової науково-практичної конференції викладачів МДУ, яка відбулася 20 лютого 2025 року в Маріупольському державному університеті.

У матеріалах висвітлені актуальні проблеми розвитку міжнародних відносин та зовнішньої політики, філософії та соціології, історії, економіки та менеджменту, права, екології, кібербезпеки, документознавства, культурології, журналістики, філології, літературознавства, методики викладання, педагогіки та психології.

Видання адресоване науковцям, викладачам, аспірантам та здобувачам вищої освіти, а також усім, хто цікавиться сучасними проблемами науки та освіти.

*Редакція не несе відповідальності за авторський стиль тез, опублікованих у збірнику.*

3. Мостовий М. І. Лексикологія англійської мови. Підручник для студентів ін-тів і факультетів іноземної мови. Харків: «Основа», 1993. 255 с.

Olena Pavlenko,  
Doctor of Philology, Professor, English Philology Department,  
Mariupol State University

## **AI-POWERED TRANSLATION FOR GLOBAL COMMUNICATION**

Artificial intelligence has transformed the translation industry, making it faster, more accurate, precise and more accessible than ever before. Machine learning algorithms have enabled the development of powerful translation tools that can quickly and accurately decode vast amounts of text across multiple languages. This technological advancement has irreversibly altered the landscape of the translation industry by breaking down language barriers, thus facilitating communication across the globe. Consequently, this paper delves into additional complexities, including the potential impacts of AI on language diversity and preservation, as well as the legal and regulatory challenges associated with the integration of AI into translation processes.

Focusing on the transformative nature of AI and examining both its remarkable advancements and the challenges that persist, researchers in language technologies and professional translators (Koehn, Philipp: 2020; Chen, Evelin, 2021; Wei, Zhao, Glavas, Goran, Peyrard, Maxime: 2020, Maite, Melero, 2024 and others) delve into the imperative role of context to achieve translation excellence, examine the strategies to overcome the challenges it conveys as well as offer insights into the multifaceted relationship between translation and context.

Furthermore, they critically evaluate the current state of AI-powered translation, identifying its strengths, weaknesses, and potential for future development.

To clarify the issue in question, it comes to be imperative to narrow the scope of the research by focusing on a specific aspect. The following questions can guide this focus: 1) How can AI-powered translation be leveraged to enhance educational experiences? 2) What are the ethical considerations associated with the use of AI for real-time translation in international relations? 3) How can we mitigate bias and ensure fairness in AI-powered translation tools? 4) What strategies can be employed to utilize AI for the preservation of endangered languages? The latter comes closer to the potential possibility of preserving these languages, however, their efficacy is constrained by factors such as data scarcity and linguistic complexity.

The commonly recognized fact, that English has historically dominated the digital landscape, i.e., being the dominant language (*lingua franca*) on the internet since its inception, primarily due to its widespread use in business, education, and technology has been extensively explored at conferences worldwide, especially in the context of AI development. The percentage of websites in English has remained relatively stable over the past few decades, fluctuating between 50 and 60%.

This linguistic dominance is further underscored by a report from the Organization of Ibero-American States, which indicates that 95% of scholarly publications are in English, with Spanish and Portuguese representing a negligible 1% [2]. While there has been a gradual increase in the number of websites in other languages, particularly in recent years, English continues to maintain its dominant position. Throughout history, various languages have served as *lingua francas*: Latin, Persian, Spanish, French, German... depending on the region or field. Today, English dominates both geographically and across domains [4], but one should not associate the above statement with Orwell's well-known concept of "language control", exemplified by Newspeak in "1984" and "<... designed to actively manipulate the language to limit thought and control the population" [1]. Consequently, while Orwell envisioned language as a weapon wielded by the powerful to control the powerless, AI's influence is more subtle, shaping our linguistic landscape without the overt intent to dominate. In other words, in contrast to Orwell's dystopian vision of portraying the language as instrument for oppression, AI-powered tools aim to facilitate communication and understanding, potentially enhancing the work of human translators. In this regard, it's imperative to bear in mind that "<... AI is a tool, and like any tool, it can be used for good or ill. By understanding the potential risks and benefits, we can work to ensure that AI is used to enhance human communication... >, rather than restrict it. [1].

Yet, despite the advancements and immense promise AI provides in the field of translation offering unprecedented speed, scalability, and accessibility, AI-generated translations often fall short of human-quality output. Considering the evaluation of machine translation, Philipp Koehn asserts that "<... 'its quality is still an open research question'", describing the latter as "a task-based evaluation where the quality emanating from MT is 'good enough' for a number of real-world problems to not have to warrant commissioning a full manual translation" [3, p.295]. Wei Zhao, Glavas, Goran & Peyrard Maxime, concerning themselves with reference-free machine translation evaluation compare original texts "to (sometimes low-quality) system translations, that represent a natural adversarial setup for multilingual encoders". On directly measuring the (semantic) correspondence between the source language text and system translation, they assume that it "<... would remove the need for human references and allow for unlimited MT evaluations" [5, p.1656].

Thus, focusing on the interplay between human and machine, one should aim to shed light on the future of the translation industry, exploring in particular, the ethical challenges posed by AI-powered translation, including issues of bias, transparency, and accountability. The question of whether AI can fully replace human translators remains complex. While AI-powered translation tools have made significant strides, they still require human intervention to achieve optimal results. The collaboration between experienced translators and editors, working in tandem with AI, can lead to high-quality translations that are culturally sensitive, accurate, and appropriate. Businesses should recognize the potential benefits of AI-assisted translation in facilitating communication with diverse audiences. However, for specialized fields demanding deep domain knowledge and cultural nuance, human translation remains the superior option.

### **References**

1. Chen, Evelin, 2021. Controlling Words, Controlling Thoughts: Language in “1984” [on line]. Available at: <https://www.thejrexecutive.com/post/controlling-words-controlling-thoughts-language-in-1984> [Accessed 11 December2024].
2. El Pais, 2021. How to End the Hegemony of English in Scientific Research [on line]. Available at: <https://english.elpais.com/usa/2021-07-30/how-to-end-the-hegemony-of-english-in-scientific-research.html> [Accessed 10 December2024].
3. Koehn, Ph., 2020: Neural Machine Translation: Cambridge University Press, p.295.
4. Maite, Melero, 2024. The Future of Language and cultural Diversity [on line]. Available at: [https://www.clarin.eu/sites/default/files/01\\_Melero\\_CLARIN2024\\_Keynote\\_The-Future-of-Language-Diversity-in-the-Age-of-AI.pdf](https://www.clarin.eu/sites/default/files/01_Melero_CLARIN2024_Keynote_The-Future-of-Language-Diversity-in-the-Age-of-AI.pdf) [Accessed 12 December2024].
5. Wei Zhao, Goran Glavaš, Maxime Peyrard, Yang Gao, Robert West, and Steffen Eger, 2020. On the Limitations of Cross-lingual Encoders as Exposed by Reference-Free Machine Translation Evaluation. In Proceedings of the 58th Annual Meeting of the Association for Computational Linguistics, pp. 1656 – 1671. [On line]. Available at: <https://aclanthology.org/2020.acl-main.151/> [Accessed 10 December2024].