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AI CHALLENGES AND HUMANIST FOUNDATIONS FOR THE TRANSFORMATION OF HIGHER EDUCATION

Yurii Mielkov

Institute of Higher Education of the NAES of Ukraine,
Kyiv, Ukraine

Abstract. Challenges related to the growing usage of technologies based on generative AI are considered from the perspective of philosophical analysis. It is argued that current AI issues should lead to the transformation of higher education on the principles of humanism, so that technologies could augment human beings and their activities, while allowing humans to have full control over AI.

The rapid development of the technologies based on the special kind of artificial intelligence – generative AI that has been presented to the general public at the end of 2022 – has led to many discussions that started to appear both in mass media and in academic publications. The very place of a human person in the today's world of artificial intelligence and machines that supposedly are able to "think," is now being questioned.

If machines are capable of thinking and generating knowledge, then they could definitely surpass their creators in many forms of activities that used to be traditionally associated with humans. According to some of the leading experts in machine learning, the development of AI-based technologies present even a threat to the very existence of humanity, to say nothing about lesser threats of unemployment [2].

However, I would argue that those issues are first of all problems of philosophy, and not just of technology, including machine learning. The very term "artificial intelligence" is

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partly misleading and obscure due to the lack of clarification of what "intelligence" actually is: while a machine could process data at a rate that exceeds any human abilities, it can't actually "think" and "be intelligent" in a way that is not reduced to but simple operations of formal logic [3].

Thus, no machine could be capable of exactly "replacing" a human person in his or her *human* activities: AI can only take on the mechanical tasks humans have to spend their time and efforts on. In other words, it does not make much sense to fear any sound rise of unemployment due to the development of AI technologies: only humans that do not perform their job in a creative way may have such a fear. AI could well replace human workers in doing routine, mundane tasks that could be automated – thus augmenting humans and allowing them to dedicate themselves to more creative work.

On the other hands, that means that the development of technologies based on generative AI leads us to the necessity to consider many new issues related to the sphere of education, and especially higher education. While many researchers refer to such obvious topics as digital literacy and the problems of academic plagiarism, with ChatGPT-4 and other similar tools being extensively and relatively effectively used for, say, writing term papers instead of students – while all these topics are still important, the AI challenges relate to the very understanding of the goal and the mission of higher education in the first place. In accordance with what was noted about the AI technologies replacing humans in non-human work, it becomes even more necessary to follow the classical ideal of university in educating creative thinking and the ability for a person to follow one's own mind, which is exactly what the philosophical conception of humanism is all about. A real threat to education is not just the AI usage, as students will continue to use generative AI even if their institutions would try to ban the technology, but the impression that such a technology is in fact superior to ourselves

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[1]. And that's why the most important task of today's higher education becomes positioning the AI technologies in the correct way by allowing human beings total control over what they are using and for what purpose exactly.

References

1. Osman R. Intelligent responses needed for artificial intelligence // University World News, 12 May 2023. [Електронний Ресурс]. Режим доступу: https://www.universityworldnews.com/post.php?story=20230512052612694

2. Zhang B. et al. Forecasting AI progress: evidence from a survey of machine learning researchers // arXiv, art. 2206.04132, 8 June 2022.
DOI: 10.48550/arXiv.2206.04132.

3. Zinchenko V., Mielkov Y., Nych T., Abasov M., Trynyak M. Human thinking in the age of generative A.I.: Values of openness and higher education for the future // 2023 International conference on electrical, computer and energy technologies (ICECET), Cape Town, South Africa, 2023. P. 1-6.
DOI: 10.1109/ICECET58911.2023.10389449.