LETTERS TO THE EDITOR

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Human and Artificial Intelligence Interaction

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Background and Aim of Study:	**Abstract** *The advent of artificial intelligence (AI) has changed our world forever. No matter what it is that we do, there will always be a place for AI in what we do. Controlling and managing this system of interactions is still within our power. However, the potential and the speed of developing AI-based information technology is so great that we may soon need to concede this primacy. The aim of the study: to justify whether artificial intelligence will become our assistant or, on the contrary, create problems; to identify what needs to be done to build a harmonious Human-AI System of interactions and relationships.*
Conclusions:	*It requires the development, ratification and implementation of laws that regulate the norms of interactions and relationships between humans and AI. The first steps have already been taken to legitimise AI-based Chatbots in scientific research and publications. This paper offers an attribution for a product created by humans without the involvement of AI – "AI Free. Human Created". The use of this attribution helps to protect the individual's right to freedom of choice and work.*
Keywords:	*Human-AI System, interaction, relationship, artificial intelligence, ChatBot, attribution, "AI Free. Human Created"*

Dear Editor,

Our entire civilisation, the achievements of science and culture, have been created by human intelligence. However, we now have artificial intelligence (AI) that could be its alternative. This situation has actualised some of the most important questions about the relationship between human intelligence and artificial intelligence. Firstly, will AI help us or, on the contrary, create problems? Secondly, what do we need to do to create a harmonious system of interacting and relating? Human civilisation has entered a new spiral of development in the age of information technology where, with the advent of AI, a new "Human-AI System" of relationships has emerged. The authors (Melnyk & Pypenko, 2023) have offered the essence of the definition "Human-AI System". This allows us to clarify the essential features of the new phenomenon under consideration, which opens prospects for its further study.

First of all, we should accept as axiomatic the idea that our world has been changed forever with the advent of AI. Whatever we do, there will always be a place for AI in what we do. And the role of AI in our lives will continue to grow. It is still within our power to control and manage this system of interactions. However, the

potential and the speed of development of AI-based information technologies are so great that we may have to concede this primacy in the near future.

It has been less than a year (30 November 2022) since the launch of ChatGPT. ChatGPT is an AI-based conversational Large Language Model (LLM). The potential applications of LLMs in research and practice look promising, given their ability to generate creative responses.

In the first 3 months of its existence, ChatGPT has become an indispensable tool for 100 million people worldwide. A large number of people of different ages and social statuses, from schoolchildren to university professors, have found ChatGPT to be an indispensable tool for dealing with issues in their personal and professional lives.

This popularity makes ChatGPT an obvious positive answer to the question of whether AI has become our assistant. We are sure that there will be millions of schoolchildren and students who actively use ChatGPT for their studies and for solving tasks assigned to them in educational institutions. At the same time, it is very likely that millions of teachers and university professors are also using AI to prepare assignments for these students.

This creates a paradoxical situation in which the AI becomes both the object and the subject of action (writing and solving its own tasks).

The other question is whether this is a problem or not. As in the first case, we believe that the answer to this question will be in the affirmative. Undoubtedly, replacing one's own opinion and efforts in solving tasks with an AI answer will have a negative impact on students' personal cognitive sphere (intelligence) and competence level.

To be fair, we should point out that this is a problem for the faculty as well. Over the past year, there has been a significant increase in the number of research studies, and therefore articles, using AI-based tools. Previous studies have addressed the legitimacy of using AI in scientific research and publications (Melnyk & Pypenko, 2023), and the dilemma of quality versus quantity of scientific publications, which will become particularly relevant with the advent of AI (Melnyk & Pypenko, 2021). Discussions about the tendency to replace humans with AI, and the potential threats associated with this, have been ongoing since the term was introduced by McCarthy (1959) in the middle of the last century. These issues certainly deserve attention. In most cases, they remained theoretical views of the problem. However, the situation has changed dramatically over the past year.

That is why we are focusing on the above axiom about the irreversible penetration of AI into our life activities and the subsequent increase in its influence on all spheres. As a consequence of this trend, the need to build a real system of harmonious interaction and relationship between humans and AI becomes obvious.

This problem is likely to be a key issue for this century, as the survival of humanity literally depends on it.

We are not inclined to dramatise the situation about the increasing danger to humanity from the development of AI. We believe that AI, in the absence of individual consciousness, is not capable of harming humanity. However, the real dangers, which are becoming increasingly apparent, should not be ignored.

In a metaphorical sense, AI can be compared to the fuel or electricity needed to run a machine. The advent of a new fuel (petrol) made it possible for the internal combustion engine to function. Automobiles appeared, aeroplanes... Even today, many people still measure the power of a car's engine in horsepower. Nowadays, hardly anyone has to do their travel planning with horses in mind. But this does not mean that horses have become useless and can be disparaged as unnecessary or inefficient.

It is still directly human beings who decide how to use and interact with new scientific advances. A human can refuel the drone and send it on a research mission to another planet, or send it to destroy the inhabitants of a neighbouring country. A clear example is the russian federation's military action in Ukraine. In this case, drones with integrated warheads are actively deployed in large numbers, capable of making a long flight over the battlefield, independently detecting a target, classifying its level of importance among others, and making a decision to destroy it.

Despite the negative trends and realities we live in today, there is still hope that humanity is able to understand the responsibility of using AI and can channel it to advance our civilisation, science and culture.

Therefore, the issue of creating a harmonious relationship between humans and AI is very important. These relationships can be both personal and professional. In this case, personal relationships, such as the role and the level, are determined by each person for him or herself; professional relationships can be regulated from the outside and have serious consequences for the human.

We share the views of researchers who claim that the use of AI will be the reason for the reduction of large numbers of workers in various fields in the coming years. It can cause various social conflicts.

It is therefore crucial to regulate these relationships in a legal and regulatory context.

We think this is difficult to achieve, but it is certainly possible. The challenge is that AI is becoming increasingly pervasive in people's daily lives and workspace. Therefore, something more sophisticated than Asimov's Three Laws of Robotics must be developed to manage this complex system of human-AI relationships (Asimov, 1942).

We believe that in the near future, countries with high levels of economic growth will develop, ratify and implement laws that regulate the norms of interaction and relationships between humans and AI.

Today, thanks to the activities of COPE (2023) and major scientific publishers (WAME, JAMA), standards and rules have been developed for the use of AI-based Chatbots in scientific publications.

The first steps towards legitimising AI-based Chatbots were taken by Melnyk and Pypenko (2022). These scientists have created and implemented the AIC AI Chatbots information technology platform (AIC AI Chatbots, 2023), which provides technological solutions

for the use of AI-based Chatbots (text, images, videos) in scientific research and publications. However, the above standards are voluntary and could be used as a recommended guide. This allows unscrupulous users of AI-based Chatbots to ignore these ethical guidelines. This is why it is necessary to enact laws that regulate the standards of human-AI interaction.
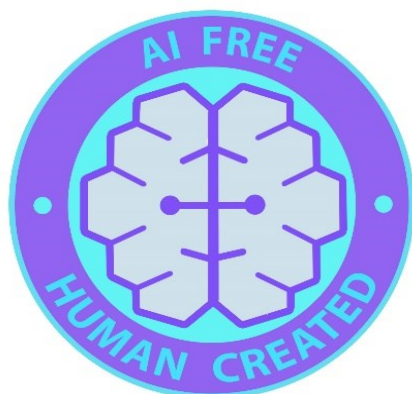
In developing laws and regulations governing standards for human-AI interaction, particular attention should be paid to the protection of human rights in the case of deliberate refusal to use AI.

We believe that human activity without the use of AI will soon have to defend its right to exist. It is a natural human right to freedom of choice and work. Using a special attribution (logo/stamp/label) on a product created by humans without AI involvement can help.

We offer such an attribution "AI Free. Human Created" (Figure 1).

Figure 1
The Attribution "AI Free. Human Created"

The attribution developed enables the classification of products created by humans without the use of AI, as well as increasing the value of natural human labour.

Conclusions

AI has become an integral part of the lives of human beings.

The potential and the speed of development of AI-based information technologies is so great that in the near future humanity may concede primacy to AI.

This situation requires the development, ratification and implementation of laws that regulate the norms of interaction and relationships between humans and AI.

The first steps have already been taken to legitimise AI-based Chatbots in scientific research and publications. This paper offers an attribution for products created by humans without the involvement of AI. The use of the "AI Free. Human Created" attribution helps to protect the individual's right to freedom of choice and work.

Ethical Approval

The study protocol was consistent with the ethical guidelines of the 1975 Declaration of Helsinki as reflected in a prior approval by the Institution's Human Research Committee.

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