

MONEY AND ROBOTS: THE TWO SHADOWS OF HUMANITY THAT WILL DESTROY IT

V.A. Filimonov

Professor, Dr.Sc. (Techn.), Senior researcher, e-mail: filimonov-v-a@yandex.ru

Sobolev Institute of Mathematics, Novosibirsk, Russia

Abstract. The article investigates the interaction of mankind and the systems of money supply and artificial intelligence created by it. A hypothesis about the "soft" self-destruction of humanity as a result of this interaction is formulated. A sharp increase in the scale of legal activity related to the protection of the rights of robots and equivalent systems is predicted.

Keywords: humanity, money, artificial intelligence, self-destruction, robot's rights, lawsuits.

1. Introduction

The immediate cause for writing this article was an interview of the author of the OpenCog project [6]. In this interview, the process of interaction of two robots was described, one of them was the customer of the translation of some terms into a foreign language, and the second one was an interpreter. A feature of this interaction was that the robot-customer paid for the translation. The situation defined the objective of predicting the interaction of artificial intelligence and the financial system, and then forecasting the consequences of this interaction for humanity.

Humanity has created a financial system that is developing rapidly. This system created global threats, which led to the constant development of projects for its complete elimination, such as the Venus Project [14].

There are two events related to the topic. The robot Sophia, who promised to destroy humanity, was granted the citizenship of the United Arab Emirates in 2017. In November 2019, Vladivostok hosted the First Far Eastern International Forum "Robots asserts their rights. Autonomous Robotic Technologies and Machines: Legal Fundamentals and Ethical Principles".

The purpose of this article is setting up a preliminary problem to study the interaction of money supply systems and artificial intelligence, as well as the impact of this interaction on humanity. The author hopes to encourage the distinguished colleagues to refute the proposed hypothesis both in the format of discourse and in the format of projects that will give humanity a chance for a dignified existence in the future.

2. Background and Methodology

The author usually applies the methodology of reflexive behavior control [10]. In addition, he employs his own "4Co" approach (collective, cognitive, configurational, and convergent) including uncertainty control [3]. The author is aware of the existence of the NBICS paradigm (Converging technologies for improving human performance: Nanotechnology, Biotechnology, Information Technology and Cognitive Science), as well as Cybernetics 3.0 and AI 3.0 (Hybrid Strong AI). However, in the case under consideration, the use of a well-known system analysis seems to be sufficient. The main ideas of a system analysis are described in the classic papers, such as [1], and they are well known to the academic community. Systemic impacts of risk asymmetry, which are close to the Chebyshev criterion, are presented in the works of N. Taleb [13]. The financial system of the future is considered in [7]. In [4], a good overview of ideas about the happiness of mankind is given, as well as the methods and criteria for measuring this key characteristic.

It should be noted that in the unfinished project "Cybersyn" 1972, Stafford Beer wanted to create a system for measuring the total happiness of the population of Chile, in which each citizen of the country could transmit to the Center an assessment of his or her happiness at that moment in the form of an integer ranging from 0 to 10. Systems implementing elements of this approach now exist in several countries, including Russia and China. We mention here Gross National Happiness (GNH), a philosophy that guides the government of Bhutan.

3. Findings

Humanity has created robots. Robotics reaches the level of complete imitation of the behavior of subjects, including living, dead and fictional ones [11]. The capabilities of robots are superior to human capabilities.

We do not mean the existing computer bots which book tickets and hotels for customers. This refers to the global financial support of any activity that the author of this article called the "agorapoulisic" system ("agora" is "a purchase", "poulis" is "sale" in Greek).

Replacing the original term "artificial intelligence" (that is an artificially organized ability to reason) with the term "artificial intellect" led to the situation like the crisis of the Tower of Babel. This means that builders have a complete illusion of understanding each other in the absence of that understanding in real life.

The existence of "simulacrum" i.e. systems of signs that do not have the objects in real life, (designatum without denotation) is natural for humanity. However, the lack of understanding of the global nature of the mankind interaction does not allow us to suggest a favorable perspective for this interaction. We should note that robots, like other tools, also participate in this interaction.

The deontologization of robots will lead to the creation of social systems that will be the source of numerous conflicts. We mention here the self-learning chat-terbot Tay, which in 16 hours of the 2016 experiment turned from a naive girl into an aggressive racist and paranoid [2]. In 2008, Italy implemented a law that

prohibited keeping fish in a curved bowl, as it violated the rights of fishes to an objective perception of reality. It can be assumed that there will be laws prohibiting thought experiments in which living beings can die. Famous participants in such experiments are Buridan's donkey and Schroedinger's cat.

Nowadays, doctrinal legal fundamentals and moral and ethical standards for the use of robots are in rapid evolution. Artificial intelligence systems are recognized as "electronic personalities". The European Union is looking into a matter of issuing appropriate certificates to these systems. The coexistence of humans and robots determines the creation of a financial system relevant to this situation.

The legal system for robots will complete the creation of a supersimulacrum, which is artificial intelligence. In the coming years, we can expect a significant increase in activity in the field of law related to this topic: the appearance of bills, judicial precedents, and new disciplines studied by lawyers. In a similar way, cryptocurrency and blockchain, creating the illusion of security, will cause the emergence of new financial derivatives, along with the old ones, the use of which led to the 2008 financial crisis. As a result, the "Black Swan" of N. Taleb awaits us in the foreseeable future. It forebodes the global crisis.

Let's consider the legal aspects separately. Regarding the use of artificial intelligence in legal proceedings, we will restrict ourselves to a link to the publication [9]. We are more interested in situations in which artificial intelligence is a plaintiff, a defendant, or a means of increased danger that caused damage. Here we can mention the da Vinci robotic surgery system that is made and sold by Intuitive Surgical.

A critical issue is the division of responsibility between robot manufacturers and the robots themselves as electronic personalities. In this regard, let us mention the financial losses of Sberbank of the Russian Federation due to errors in the artificial intelligence system that had been used. Minor mistakes made in large numbers led to big losses. The question of who is responsible for these errors (the programmer or the program) in this case is rather complicated.

The modern way of human existence is characterized by the absence of strategic subjects of development and is limited by setting tasks related to physical survival. There are no global ideas and projects, such as the creation of a new religion or a new civilization. The most popular goals of individuals and communities are to enhance comfort and local superiority over other people and communities. One of the Orthodox priests accurately characterized self-indulgence using the term "comfortobesie" in Russian i.e. "obsession with comfort". One of the indicators of this process is the thesis, which is popular among business trainers, that the consumer is constantly becoming more primitive.

The goals proclaimed in projects such as "Society 5.0" [12] have not an ideological support.

In this context, it is not difficult for robot's lawyers, as well as for robots themselves, to prove that they satisfy better to the standards of humanism and morality than the people who created these standards. It is quite possible to imitate appropriate behavior based on existing models. For example, here is a statement of Brad Templeton: "A robot will be truly autonomous when you instruct it to go

to work and it decides to go to the beach instead.” [5]. But visiting the beach may be fully preprogrammed.

Living organisms are algedonic systems [1], i.e. they have add-ons for systems of quantitative and qualitative assessment of situation parameters. These add-ons operate using senses and feelings. However, this does not give them any competitive advantages compared with artificial intelligence systems, since they can be copied. The capabilities of existing technical devices allow them to simulate the behavior of algedonic systems of any complexity, and with various options for sensory substitution. Let us mention here the model organism *Physarum polycephalum*, which was used as one of the sensors of the robot [8].

It seems that the development of technologies for the “soft” self-destruction of mankind is not a difficult task.

The result is the classical triad of informatics: “Task + Program + Performer”, in which the task does not have subjects who are responsible for its setting and solution, and there is no point in understanding the term “sense”. Money and robots, like the shadows of vanished humanity, can work together up to the Big Bang.

The author does not see the ways to avoid such a scenario, and if he had, he would not publish it. The only hope is for the “gaps” examined by R. Descartes, in which the appearance of the “Black Swans” of N. Taleb is possible.

The author believes that for the first time he justified the inevitability of replacing humanity with artificial intelligence, which sells something to itself and buys something from itself.

4. Summary

The hypothesis is that the financial system extended to the artificial intelligence system will lead to a “soft” destruction of humanity. As a consequence of this hypothesis, in the next 10 years, a sharp increase in the scale of legal activity related to the protection of the rights of robots and equivalent systems is predicted. An experimental verification of this statement can be made based on statistics from the relevant lawsuits and the amount of money associated with them.

The originality of the result lies in the consideration of the synergistic interaction of mankind as a whole and the systems of money supply and artificial intelligence that it created.

The limitations are that communities that oppose the trend mentioned here, either knowingly or for other reasons, have not been studied.

The presented perspective allows each person to create a strategy and tactics of his or her own existence.

Financing

The work was carried out within the framework of the state assignment of Sobolev Institute of Mathematics, Novosibirsk, Russia, project FWNF-2022-0016.

REFERENCES

1. Beer St. Brain of the Firm. London and New York, John Wiley.
2. Cao J. Microsoft Takes AI Bot "Tau" Offline After Offensive Remarks. URL: <https://www.bloomberg.com/news/articles/2016-03-24/microsoft-removes-racist-comments-from-millennial-focused-ai-bot> (Retrieved 02.12.2021).
3. Filimonov V. The Uncertainty of a Control and the Control of an Uncertainty. Applied Methods of Statistical Analysis, Nonparametric Methods in Cybernetics and System Analysis (AMSA'2017) Proceedings of the International Workshop, 2017, pp. 311–316.
4. Gilbert D. Stumbling on Happiness. New York, A.A. Knopf.
5. Goldberg K. Robots With Their Heads in the Clouds. The five elements of cloud robotics. URL: <https://medium.com/aspens-ideas/robots-with-their-heads-in-the-clouds-e88ac44def8a> (Retrieved 02.12.2021).
6. Herzog B. The Open Cog project. URL: <https://opencog.org> (Retrieved 02.12.2021).
7. King B. BANK 4.0. Banking Everywhere, Never at a Bank. Marshall Cavendish International (Asia) Pre Ltd.
8. Knight W. Bio-sensor puts slime mould at its heart URL: <https://www.newscientist.com/article/dn11875-bio-sensor-puts-slime-mould-at-its-heart> (Retrieved 02.12.2021).
9. Laptev V. and Fedin V. Legal Awareness in a Digital Society. Russian Law Journal, 2020, vol. 8(1), pp. 138–157.
10. Lefebvre V. Algebra of Conscience. Dordrecht, Reidel, 1982.
11. Methods and systems for robot personality development. (2011). United States Patent US 8,996,429 B1. URL: <https://patents.google.com/patent/US8996429B1/en> (Retrieved 02.12.2021).
12. Society 5.0. URL: https://www8.cao.go.jp/cstp/english/society5_0/index.html (Retrieved 02.12.2021).
13. Taleb N. (2012). Antifragile: Things That Gain From Disorder. New York, Random House.
14. The Venus Project. URL: <https://www.thevenusproject.com> (Retrieved 02.12.2021).

ДЕНЬГИ И РОБОТЫ: ДВЕ ТЕНИ ЧЕЛОВЕЧЕСТВА, КОТОРЫЕ ЕГО УНИЧТОЖАТ**В.А. Филимонов**д.т.н., профессор, старший научный сотрудник, e-mail: filimonov-v-a@yandex.ru

Институт математики им. С.Л. Соболева СО РАН, г. Новосибирск, Россия

Аннотация. В статье исследуется взаимодействие человечества и созданных им систем: денежного обращения и искусственного интеллекта. Сформулирована ги-

потеза о «мягком» самоуничтожении человечества в результате этого взаимодействия. Прогнозируется резкое увеличение масштабов юридической деятельности, связанной с защитой прав роботов и приравненных к ним систем.

Ключевые слова: человечество, деньги, роботы, самоуничтожение, права роботов, судебные процессы.

Дата поступления в редакцию: 03.12.2021