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**LAW AGAINST THE TECHNOLOGICAL «ARMAGEDDON»**

**Key words:** *technology development, legal regulation, mixed justice, justice of artificial intelligence.*

The most radical view of humanity's prospects in the context of technology development is the concept of technological singularity. Its author, V. Vinge, believes that after the emergence of intelligence that surpasses human, the speed of progress will be overwhelming. Mankind will find itself in a «regime that differs from our past no less radically than we, people, themselves are different from the lower animals. Such an event cancels due to the inappropriateness of all human laws, perhaps in an instant. The uncorrected chain reaction will begin to develop exponentially without any hope of restoring control over the situation» [1]. According to V. Vinge, this will either lead to artificial intelligence (AI), or intelligence amplification technology (IA). That is, we can conclude that technological singularity is considered as a general negative final of the two hypotheses we have considered. However, despite the arguments for the inevitability of such a scenario, our analysis of promising problems of law shows that humanity has the ability to maintain control over the situation. By this we mean the solution to effective legal regulation.

We formulate the following provisions regarding the long-term tasks of legal regulation due to the hypothesis of the development of artificial intelligence and the hypothesis of the development of technologies of transhumanism:

1. The development of technologies cannot be prohibited. Despite the risk of dangers, the absolute prohibition of the development of artificial intelligence systems or transhumanist technologies is impossible. Legal regulation in this area should provide incentives for socially effective use of technology and minimization of the risks of technology abuse. A separate task of legal regulation in this context should limit the destructive effects of global corporations.

2. Legal regulation should ensure the maximum diversification of technological decisions. Technology should not be limited, but on the contrary become as diverse as possible. If the right is to create conditions / requirements to create as many different technology solutions as possible, this will effectively prevent the development of negative impacts. For example, known negative scenarios for the implantation epidemic (inflicting harm to mankind due to a violation of the work of all implanted devices) or «black mucus» (destroying planetary biomass by nanobots implementing the program of self-reproduction) will simply be impossible, due to the guaranteed availability of alternative technical solutions.

3. The classical scheme «developer-owner-user» is an urgent and popular among the modern level of technologies. Thus, the Resolution of the European Parliament of February 16, 2017 as for the norms of civil law on robotics offers such mechanisms as the creation of a system for registering robots, a special fund for civil liability insurance, is proportional to the responsibility of developers and owners of robots, depending on the time during which the owner carries out training work, etc. [2]. The complication of technologies will require the transition to a new, more complex, scheme of legal regulation. It is clear that the legal regulation of the socialization of artificial intelligence will go from the consideration of the work as the object of relations to the allocation of his rights, duties and responsibilities. The problem of the legal status of a physical person whose abilities are reinforced with the help of technologies of transhumanism will be required to be solved. Hypothetically, this problem does not seem complicated and can be solved by adding certain aggravating or mitigating circumstances, restrictions on the occupation of certain positions, performance of works, etc.

4. In addition to traditional justice, the emergence of two new species, we will name them the «mixed justice» and «justice of artificial intelligence», whose functioning will provide counteraction to work, which is a threat to social development and stability. The artificial intelligence justice will be based on robots. Such a system will provide a generalization of clear algorithms of experience gained during the existence of traditional justice.

It is clear that copying the human justice system for artificial intelligence does not make sense. Fundamentally different physical characteristics and needs require a priori to refuse such an approach. However, the creation of this system is a prerequisite for providing humanity with the opportunity to control the development of social processes. Most likely, the justice of artificial intelligence will be created on the basis of robots. Physical and intellectual data of a person will not be obviously enough for the effective functioning of this justice system. Creating such a system involves a synthesis of clear algorithms of experience gained during the existence of traditional justice. Such a generalization should become one of the main areas of modern legal science. It is noteworthy that already there are Legaltech projects within which AI study current legal practice [6]. However, the task of creating a copy of the existing practice in the field of traditional justice is not enough to ensure the justice of robots, but the experience gained by humanity in the field of justice is an extremely important source of information for ensuring legal regulation of the work of robots.

It is worth noting that the thesis on the use of the experience of traditional justice, together with the inappropriateness of creating its computerized copy, is receiving an interesting confirmation today. There is a debate on introducing criminal risk assessment algorithms. The latter are already used by some courts for making decisions on determining the type of punishment, the feasibility of staying in prison, the severity of the ages. Theoretically, this reduces bias because judges make decisions based on data processing, rather than on their own, possibly subjective beliefs. This raises an extremely important issue. Because the algorithm's base is an earlier decision, it (the

algorithm) can amplify and perpetuate the bias, generate even more biased data for further cycles of even more biased solutions [3]. For example, if before a judge a person with a low income, the algorithm is very likely to advise to imprison the court. The next time in a similar situation, the algorithm will be even more categorical, the next – more and more ... Obviously, the solution to the problem is not in copying or constructing a computer remake of the traditional case-law approach to traditional justice. Promising here is the expansion of the number of arguments used by the court. The use of technologies of artificial intelligence and large data can bring the classical legal requirements for the objectivity, completeness and comprehensiveness of the trial to a fundamentally new level [4].

A suitable example with American military catapults will be appropriate here. At the beginning of the era, jet engine seat pilots developed on the basis of average pilots. After qualitative change in speed, the catapult, precisely because of this approach to development, became deadly. Eliminating the error became possible only after gathering a large amount of information. All pilots were checked for compliance with the average size laid down in the calculations of the catapult. It turned out that a pilot that would match all the significant for catapult sizes does not exist. Moreover, one of the main conclusions of the study was as follows: any system designed for the average person is doomed to failure [5]. This example is an extremely illustrative illustration of the problem of the effectiveness of punishment. Continue the analogy. Crime is an accident. By using the law, we try to pull a person out of a social peak. However, because of the consideration of all people as average, a specific person to whom the criminal-law «catapult» is applied is likely to suffer such «damages» that will exclude the possibility of its return to normal social existence.

Engineers have solved the task of collecting a large amount of data, analyzing them and leaving the cabin the same for everyone, the technologies of individual settings have been introduced. Continuing the analogy one can assume that the solution and such an eternal problem of criminal legal regulation as an appointment of effective punishment can also be found using Big Data. The collection and analysis of as much data as possible on punishments, psychometric characteristics of criminals, peculiarities of their post-criminal behavior, etc., can radically change the situation.

5. Ensuring legal safeguards for the implementation of morphological and reproductive freedom through a balance between the exercise of the right of a particular person and the need to ensure overall security, stability and development.

6. Resolution of the question of the limits of criminal law regulation in the field of biogenetic and cognitive problems, socially dangerous violations of morphological or reproductive freedom, as well as violations of the requirements of diversification of technological decisions.

7. Since monitoring the development and use of certain technologies will require an effective monitoring system, the analysis of legally relevant information will become much more complex and will require fundamentally new professional competencies. The traditional division of tasks between

lawyers and specialists will be extremely ineffective. There will be convergence of legal and technical sciences. A solution to the question of defining and developing new types of legal professions will be required. In this context, the wording of new laws should be made technologically neutral. It is the approach that will ensure the necessary stability of legal regulation in the conditions of rapid changes in technological reality.

8. The significance of the global problem becomes a matter of legal safeguards for the effective development of the information environment. Huge amounts of information accumulated by humanity in the process of life will obviously require new legal mechanisms. Existing rights to ownership of information and intellectual property rights are likely to be supplemented by new institutions resembling the right to use subsoil and the right to archaeological activity. The complex of these issues should be considered as the establishment of a coordinate system for the future legal assessment of both artificial intelligence and technologically advanced people, since it is precisely in this area that the overwhelming part of their socially significant activity will take place.

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