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The Russian draft bill of "the Grishin Law" in terms of improving the legal regulation of relations in the field of robotics: critical analysis

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Abstract

The article presents a critical review of the Russian draft bill of "the Grishin Law" on the regulation of relations in the field of robotics. The subject of the research is the problem of vesting autonomous robots with legal personality characteristics. The theoretical basis of the article is the modern scientific achievements in the field of artificial intelligence and neural networks, the legal debate on the social and legal implications of the use of autonomous robots. The authors analyze the approaches of the bill developers in terms of endowing autonomous robots with the characteristics of a subject of law. The authors come to the conclusion that it is necessary to develop a universal international document on the matter of establishing liability for harm caused by autonomous robots and introducing a safety requirement of this technology for a person at the level of technical standards.

1. Introduction

In 2017 a group of scientists, including A. Neznamov, V. Naumov, V. Arkhipov, from the Research center for problems of robotics and artificial intelligence regulation developed a draft federal law in the field of robotics by the order of Grishin Robotics company. The authors of the bill treated rather carefully the approaches of the legal regulation of the use of robots [1]. First of all, the developers refrained from all-embracing regulation of all aspects of the use of robotics, affecting the most pressing issues of the use of robots. The authors of "the Grishin Law" left the task of developing a basic law on robotics for a more distant future [2].

Meanwhile, there are practically no special studies on the artificial intelligence technology, its legal regime and legal aspects of its application in jurisprudence. The research on artificial intelligence can be divided into the following groups: 1) research papers on the nature, capabilities, and predictions of using artificial intelligence technology, namely the works of N. Bostrom, K. Kelly, A. Andrew, S. Russell, S. Hawking, R. Kurzweil, A.I. Redkina, I.V. Ponkin, V.F. Khoroshevsky, A.A. Zhdanov and others; 2) research on the concept and legal personality of artificial intelligence, i.e. P. Cerka [3], J. Grigiene, N. Petit, I.N. Kuksin, G.A. Gadzhiev, V.B. Naumov, I.V. Ponkin, A.I. Redkina, S.N. Grin, D.S. Grishin, A.V. Nesterov and others; 3) works dedicated to liability for harm caused by artificial intelligence: D. Byers, P. Cerka, J. Grigiene, K. O. Belyakov, G.A. Gadzhiev, E.N. Iriskina, T.M.



Lopatina, A.V. Nesterov, I.V. Ponkin, A.I. Redkina, O.A. Yastrebov; 4) research related to the possibility of using artificial intelligence technology in the legal profession, i.e. G.A. Gadzhiev, A. Ivanov, R. Kvitko, I. Kondratyeva, I. Kondrashov, S.E. Korzhov, S. Pereverzev, A. Pronin, A. Savelyev, D. Garcia, R.D. Holowczak, N.R. Adam, E.L. Rissland, J. McGinnis, N. Aletras [4]; 5) works on private legal issues of the use of artificial intelligence technology, for example, the works of P.M. Morkhat in the field of intellectual property, military robots in international law, etc. Only one doctoral dissertation on questions of artificial intelligence in the field of intellectual property by P.M. Morkhat was defended in jurisprudence. It should be noted that it is he who owns the only monograph on artificial intelligence in the field of law. Among the scientific centers for studying the legal aspects of using artificial intelligence are the Research Center for the Problems of Regulation of Robotics and Artificial Intelligence (A. Neznamov, V. Naumov, V. Arkhipov), which is drafting legislation in the field of robotics and artificial intelligence (<http://robopravo.ru>).

2. Discussion and findings

The bill raises very serious legal issues of the use of robots.

First, the authors of the draft law introduce a legal definition of robots as autonomous intellectual systems, i.e. autonomous from humans. As the bill says "A robot is a device capable of acting, determining its actions and evaluating their consequences on the basis of information coming from the external environment, without full human control". It is obvious that the emphasis is placed on such qualities as the independence of robots during decision-making and the lack of full control over its actions on the part of a human.

It is worth mentioning that the independence of the robot at the current level of technological development is relative. Firstly, the algorithm of actions of the robot is created by a human, even if it comes to artificial intelligence or self-learning neural networks. It is the person who lays down the model of the robot's activity at the program level. Secondly, most often the robot acts in deep interaction with a human both remotely (controlling drones, deep-sea vehicles) and inside a device (controlling an aircraft). As David A. Mindell notes there is a myth about the independence of robots and it is necessary to realize clearly the dependence of robots on humans.

Moreover, it is the autonomy of robots that can be a key issue in determining the legal personality and responsibility of cyber-physical systems. The lack of autonomy turns the robot into an object of legal relations, into a technical device and a software product. The qualities of the subject of law in this case are characteristic only for the robot's owner.

Secondly, the bill proceeds from the identification of two types of robots and corresponding dualistic nature of robots:

- robots as a type of property;
- robots-agents as independent participants of civil turnover, endowed with the status of legal entities with special legal personality.

It is obvious that the issue that the robots possess the quality of the legal personality should be solved on the basis of the concept of a subject of law and the key characteristic that determines the existence of an independent legal personality, which is conventionally developed in legal science and practice. At the same time some scientists state that there is no unambiguous way to determine the subject of law, taking into account the presence of a category of legal entities that are not identical to a person. Most researchers note the premature nature of giving smart machines the status of legal entities. Such opportunity is recognized in case if artificial intelligence becomes technologically similar in many respects to the human mind in the future, and, moreover, if it possesses such qualities as conscientiousness and emotions [5].

The criteria for the subject of law selection in legal science are as follows:

- conscientiousness, will and emotions (while the lack of conscientiousness among mentally ill, children, legal entities is not the reason for depriving them of their legal personality quality);
- the independence of the person in making decisions and managing his or her actions;
- the concept of fiction of a legal entity as a means of managing risks and limiting property liability.

The comparison of an individual with an autonomous robot (artificial intelligence) leads to the conclusion that with a common sign of awareness, the robot does not possess such human qualities as emotions and will. Therefore, the identity between a human and a robot as subjects of law is impossible.

At the same time, there are no external obstacles in spreading the qualities of a legal entity to an autonomous robot through fiction as a technique of legal technology. It is customary to recognize artificially the presence of some kind of organization, although a real person or organization of people may not stand behind it. V. Naumov, V. Arkhipov in one of the works emphasize that robots can be endowed with special legal personality for certain purposes (trading through bots on the Internet, etc.) [6]. Another question is whether there is a need to vest robots with legal personality of a legal entity. Understanding a legal entity as a way to minimize the risk of legal liability is hardly applicable to robots, since it will allow manufacturers and owners of robots to avoid legal liability. Once, while discussing the resolution on robots, J. Lebreton, the European Parliament member, said: "I object to this perspective for two reasons: first of all, since it will remove all responsibility from their manufacturers and users, which would undoubtedly please the powerful lobbies; secondly, and this is important, because I believe, like Jacques Maritain, that the human is endowed with a spiritual existence, with which no artificial intelligence can be compared" [7]. Empowering robots with special legal personality is possible with sufficient guarantees of the rights of other participants in legal relationships.

In the world legal literature, attempts are being made to consider the nature of robots by analogy with the legal regime of animals. Meanwhile, in most legal systems of the world animals are considered as an object of law, taking into account the principle of humane treatment towards them. Unlike robots, some of the animals are capable of expressing emotions, but do not have free will and therefore cannot exercise their rights and obligations.

Another way to solve the problem of the legal personality of "intelligent robots" is the concept of "electronic person", which is actively defended by P.M. Morkhat in his research [8]. P.M. Morkhat enumerates the main prerequisites for endowing these or those persons with legal personality as follows: the existence of moral rights, social potential and legal convenience. Naturally, artificial intelligence can be used only for the purpose of legal convenience in a number of cases such as conducting electronic business and determining jurisdiction, creating intellectual property objects, limiting the responsibility of artificial intelligence units' developers [9].

At the same time, these goals can be achieved using other legal means and regimes without empowering robots with legal personality: as a type of property, database, etc. [10]. Therefore, the concept of an electronic person at the current stage of scientific discussion is very controversial.

Thirdly, the issue of responsibility for harm caused by the actions of robots is solved in a very original way.

When deciding on the issue of the robot's legal personality G.A. Gadzhiev, E.A. Voinikanis propose to proceed from whether the robot will be able to satisfy the demands for compensation for the harm that has taken place on its own or not. According to the authors, "if the recognition of a robot as a subject of law has any meaning or purpose, then it is in a more efficient and balanced distribution of responsibility. On the contrary, if a robot is not able to compensate for the damage caused by it, the need to recognize it as a subject of law becomes problematic. In turn, the task or social demand for the distribution of responsibility is the result of a more complex, universal demand for balance" [11].

A positive decision on vesting robots with tort can only be made in case of presence of sufficient property of such a robot or insurance of its property liability [12].

In addition, we should not forget that the punishment with its goals of correcting and preventing new offenses against robots is inapplicable. Although in legal literature it is proposed to use such a measure as robot destruction.

It should be noted that the authors of the bill did not manage to clearly draw a line in establishing responsibility for the harm caused by the robot as a legal entity and at the same time as a robot-property.

Fourthly, the bill proposes to establish a requirement for observing safety of robotic activities and to introduce a special warning system about the occurrence of a legal conflict.

3. Conclusion

Thus, the draft bill on the regulation of robotics could have become one of the most daring in the world practice, since it implied the vesting of autonomous robots with special qualities of legal personality by analogy with legal entities. However, giving the artificial intelligence the status of a legal person is possible if there are such criteria as the independence of robots from humans, the ability to exercise rights and obligations (will), and the regulated issue of taking into account the interests of people who may be affected by the robot's actions.

References

- [1] The initiative for study legal aspects of robotics and artificial intelligence "Robopapravo". Retrieved from: http://robopravo.ru/matierialy_dlja_skachivaniia#ul-id-4-35
- [2] Arkhipov V V and Naumov V B 2017 Artificial intelligence and autonomous devices in legal context: on development of the first Russian law on robotics *Tr. SPIIRAN* **6** 47
- [3] Cerka P, Grigiene J and Sirbikyte G 2015 Liability for damages caused by artificial intelligence *Computer Law & Security Review* **31(3)** 376
- [4] Aletras N, Tsarapatsanis D, Preotiuc-Pietro D and Lampos V 2016 Predicting Judicial Decisions of the European Court of Human Rights: A Natural Language Processing Perspective *PeerJ Computer Science* **2:e93**
- [5] Gadzhiev G A 2018 Whether the robot-agent is a person? (Search of Legal Forms for the Regulation of Digital Economy) *Journal of Russian law* **1** 29
- [6] Arkhipov V V and Naumov V B 2017 On some issues of the theoretical basis for the development of legislation on robotics: aspects of the will and legal personality *Law* **5** 157
- [7] European Parliament 2017 Report with recommendations to the Commission on Civil Law Rules on Robotics 2015/2103(INL)
- [8] Morkhat P M 2018 Concerning the Question about the Legal Personality of Electronic Person *Legal studies* **4** 1
- [9] Morkhat P M 2018 Artificial Intelligence Unit as Electronic Personality *Bulletin of the Moscow Region State University. Series: Jurisprudence* **2** 66
- [10] Schrijver S de 2018 The Future Is Now: Legal Consequences of Electronic Personality for Autonomous Robots *Who's Who Legal* 34313
- [11] Gadzhiev G A and Voinikanis E A 2018 Could Robot be a Legal Subject? (In Search of Legal Forms for Digital Economy Regulation) *Law. Journal of the Higher School of Economics* **4** 41
- [12] Cerka P, Grigiene J and Sirbikyte G 2017 Is it possible to grant legal personality to artificial intelligence software systems? *Computer Law & Security Review* **33(5)** 685