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STATE, SOCIETY, LAW IN TERMS OF TECHNOLOGICAL REALITY

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Abstract

The article investigate the problems facing modern society due to the universal globalization and digitalization of the economy, state, law, as well as various spheres of social and personal life. This is due to a change in the form of interaction of subjects in the modern world, which can be described as a horizontal network interaction that does not have hierarchy and subordination. The Internet architecture is transnational and linked to building timeless horizontal relationships, which makes it necessary to transform the traditional model of state and law and incorporate it into digital communication, in which human-government interaction becomes more operational, open and accessible, and hierarchical relations give way to relations of equal subjects . Along with the concept of an electronic state as a new form of interaction between personality and power, the idea of a network structure of power relations and social structures without hierarchy, centralization and coercion is formed. The problem of determining the legal status of modern robots endowed with artificial intelligence deserves special attention. In this area, the legislator is required to determine their status, personality, to choose a model for regulating the issues of interaction and responsibility. Legislator's close attention is required by the legal status of a virtual (electronic) identity and the identification of Internet users, the definition of automated systems (bots), as in this sphere there is a lag in the formation of an appropriate legal framework and proper legal regulation.

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1. Introduction

In the modern world, a significant part of human life has changed under the influence of digital and technological innovations, has begun to move into the virtual sphere. At the same time, the legal systems of the world and jurisprudence, due to their conservatism inherent to them, act without taking into account the architecture of the digital reality in which a modern person finds himself (Kelly, 2017). There is a legal vacuum and gap of legislation in the regulation of such sectors as the Internet, virtual currency and property, information security, personal data protection (Vasiliev, Shpopov, & Mataeva, 2018). A fair question arises about the principled possibility of ordering these spheres of life with the help of law.

The development of adequate models and means of legal regulation is possible if the social and technological context in which the law is to act is taken into account. The task of the doctrinal substantiation of digital law, the right aimed at streamlining socially significant relations in the digital space, is raised to the rank of priority.

2. Problem Statement

The Internet architecture is transnational and linked to building timeless horizontal relationships, which makes it necessary to transform the traditional model of state and law and incorporate it into digital communication, in which human-government interaction becomes more operational, open and accessible, and hierarchical relations give way to relations of equal subjects. Along with the concept of e-state as a new form of interaction between personality and power, the idea of a network of power relations and social structures without hierarchy, centralization and coercion is formed (Kiselev, 2017). The problem of determining the legal status of modern robots endowed with artificial intelligence (Arkhipov & Naumov, 2017) deserves special attention. In this area, the legislator is required to determine their status, personality, to choose a model for regulating the issues of interaction and responsibility (Bostrom, 2016). The legal status of the virtual (electronic) identity and the identification of Internet users, the definition of automated systems (bots) require close attention of the legislator as in this sphere there is a lag in the formation of the relevant legal framework and proper legal regulation.

3. Research Questions

Scientific research on artificial intelligence and digitalization of the state can be divided into the following groups: a) research papers on the nature, capabilities and predictions of the application of artificial intelligence technology (Bostrom, 2016); b) research on the concept and legal personality of machines with artificial intelligence (Ponkin & Redkina, 2018); c) works dedicated to liability for harm caused by robots with artificial intelligence (Aletras, Tsarapatsanis, Preoțiu-Pietro, & Lampos, 2016); d) research examining the possibility of using artificial intelligence technology in the legal profession (Kiselev, 2017); e) works on private legal issues of using artificial intelligence technology (for example, military robots in international law, in the field of intellectual property (Ross, 2017).

Among the scientific centers for studying the legal aspects of using artificial intelligence are Research center for the problems of robotics and artificial intelligence, which prepares draft legislation in

the field of robotics and artificial intelligence (<http://robopravo.ru/>), approbation and implementing the results and the promotion of such innovative research (Arkhipov & Naumov, 2017).

In modern global society, the environment of law has changed completely. Relationships began to acquire virtual features and conditions for human activity changed (Kelly, 2017). There was a problem of determining the legal status of a virtual (electronic) identity and the identification of Internet users, the definition of automated systems (bots). The new architecture of the digital Internet environment does not have the usual qualities of time and space. This is the sphere of horizontal network interaction, which has no hierarchy and subordination. The very architecture of the Internet is transnational and is associated with the construction of timeless horizontal relationships. As a result, the usual model of state and law does not fit into the digital interaction. On the one hand, at the physical level there are technical devices and software, on the other hand, the real legal relations are moving the electronic sphere, which creates a new reality. First of all, network interaction is based on the program code and self-regulation mechanisms. In many ways, the Internet sphere developed on the basis of technical norms and rules of self-regulation (customs, ethical rules, rules of the game). It should be noted sufficient effectiveness of such self-regulation.

A serious solution is required by the system problems of Internet rights: the protection of personal data, copyright protection, social networks and media, information protection, blockchain, virtual property, cryptocurrency, gaming industry in the network, etc. (Bostrom, 2016).

Among the challenges for law and power, a special place is taken by the problem of digitalization of state-legal interaction. The Internet interaction of the person and the power becomes more operational, open and accessible. Hierarchical relations give way to relations of equal subjects. The state is losing its monopoly on domination, the network community comes to the fore. Along with the concept of e-state, as a new form of interaction between personality and power, the idea of a network of power relations and social structures without hierarchy, centralization and coercion appears (Kiselev, 2017).

A serious challenge for the law is the emergence of artificial intelligence and robots. The category of “artificial intelligence” itself raises philosophical and ethical questions of the ontological order for the future of mankind. Forecasts about the future of “smart robots” differ from the predictions of the end of the human era and the beginning of the era of machines, the emergence of cyborgs (man-made) with immortality, “uprising and tyranny of machines”, the upcoming total unemployment to the priority role of humans in the creation and operation of machines (Bostrom, 2016) . At the same time, the technology of artificial intelligence is universally implemented in various fields, predicting the transfer of routine operations to “smart machines” - unmanned vehicles, programs for diagnosing and developing methods of treating patients, the use of artificial intelligence in the creative sphere (creating scripts, pictures, objects of intellectual property), robot assistants for children and people with disabilities (nannies, nurses), neural networks dealing with bankruptcy, insurance, predictions judgments (Kelly, 2017).

The spread of artificial intelligence technology (machine learning) leads to a scientific and theoretical understanding of this phenomenon from the point of view of ethics and law, as well as the development of relevant legal acts defining the nature of artificial intelligence (subject of law, object of law or something else), the consequences of using “smart machines” in the legal sphere (the acquisition of rights and obligations, compensation for harm associated with the use of artificial intelligence, the replacement

of routine work by robots and the release of workers with silts, including the potential use of artificial intelligence in the legal profession (Vasiliev, Shpopov, & Mataeva, 2018).

The importance of studying the identified problems is related to the priorities of the state policy of Russia in the field of technology and the information society. The Presidential Decree of May 7, 2018 "On the national goals and strategic development objectives for the period up to 2024" and the Information Society Strategy from 2017 to 2030 among the priorities in the digital economy are the development of a legal regulation system for the digital economy and use of artificial intelligence. The State Program "Digital Economy", approved by the order of the Government of the Russian Federation of June 28, 2017, includes neurotechnologies and artificial intelligence, robotics, and provides for the systemic regulatory support of digital technologies. At the same time, in the Russian Federation there is no necessary legal basis for the use of artificial intelligence technology. The vacuum of legal regulation in this area is obvious, while artificial intelligence is already being applied in world practice, raising the question of its legal personality (Aletras et al., 2016).

First of all, currently there are no adequate legal tools in the legal systems of the world to streamline the use of artificial intelligence. In most countries of the world, only program documents on the development of robotics and artificial technology have been adopted. In the Russian Federation, a draft law "On Robotics" was developed, which was not submitted for consideration by the State Duma of the Russian Federation. At the same time, national strategic documents define as one of the tasks the creation of an adequate system of legal regulation in the field of artificial intelligence. Thus, the Forecast of the scientific and technological development of Russia up to 2030 among the promising spheres of research calls machine learning and prototyping biosimilar, anthropomorphic robots capable of learning and interacting with humans, creating an artificial nervous system of robots.

In the field of legal research on the use of artificial intelligence, issues such as the concept and legal nature of the technology of artificial intelligence, the presence of the legal personality of artificial intelligence remain unresolved. A unified approach to the legal regulation of the use of artificial intelligence has not been formed; there is still a discussion about the endowment of artificial intelligence (Bostrom, 2016).

4. Purpose of the Study

To isolate and assess the challenges facing modern society, due to the universal globalization and digitalization of the economy, state, law, as well as various spheres of social and personal life. Investigate the need to transform the traditional model of state and law in the conditions of new digital communication, in which the interaction of man and government becomes more operational, open and accessible, and hierarchical relations give way to relations of equal subjects. Assess the development of the category of "artificial intelligence" and its subsequent use in the law.

5. Research Methods

The research used a system-structural approach to the analysis of the object of research, due to the use of a number of general scientific methods (dialectical materialistic, historical), which allowed to trace

the evolution of law, as well as the current state in the sphere of legal regulation of technological relations in modern society, state and law. Observation, analysis, synthesis used among the sociological techniques.

6. Findings

The study of the indicated problems allows us to formulate the following conclusions. Along with the adoption of strategic and policy documents in Russia, special state institutions are being created to develop state policy in the field of digitalization, robotics and artificial intelligence. In 2018, the position of representative of the President of the Russian Federation on issues of digital and technological development was established, and a ministry of digital development was formed. Similar public authorities are created in foreign countries.

The study of issues of robotics and artificial intelligence predetermines the solution of two main tasks: the fundamental possibility of the emergence of an artificial supermind (optimists and pessimists) and the problem of a future person when artificial intelligence appears as an autonomous cyber-physical system. Modern jurisprudence needs to determine its basic concept of legal regulation of relations in new technological conditions. There is no consensus in this sphere, and the proposed solutions to problems correlatively depend on the chosen approach, which can be diametrically opposite: from the need for legal regulation to abstaining from legal forms of streamlining relations in the field of artificial intelligence, legal personality and responsibility of artificial intelligence, if we recognize it.

Information security of the individual, society and the state from dangerous and destructive information and cyberattacks. According to leading experts, the main challenge for the state and corporations are cybercrime, which can cause the necessary material and financial destruction. At the same time, it is equally important to develop measures of protection at the hardware and software level and at the level of measures of legal regulation of the grounds for bringing to responsibility for computer crimes (Aletras et al., 2016).

Virtualization of education through the transition to distance technologies and online courses. Along with the advantages of distance learning, there is the problem of controlling the independence of learning and the fundamental possibility of learning without live communication. Finally, the problem of the enslavement of a person by machines (gadgets) and the emasculation of live human communication between people began to play a special role.

The need to develop a proper legal and regulatory framework for the development of the digital economy and public administration in the new information environment should be particularly emphasized. Currently, the digital economy is governed primarily by strategic and program-targeted documents, among which the most significant are laws on information and the protection of personal data. Obviously, these documents are not enough to create the necessary certainty in the legal regulation of the digital economy.

7. Conclusion

Changing the form of interaction of subjects in the modern world, their horizontal network interaction, which does not have hierarchy and subordination, and the transnationality of the Internet determine timeless horizontal relations, which makes it necessary to transform the traditional model of state

and law and include it in a new digital communication where the relationship between a person and the authorities become more operational, open and accessible, and hierarchical relations give way to relations of equal subjects. Modern science and education are clearly lagging behind in the formation of an appropriate legal framework and mechanism for the legal regulation of the new digital reality and the training of competent personnel for law-making, law-enforcement and judicial activities. The information environment dictates the need to ensure adequate legal regulation of various kinds of relations in the context of global technological challenges.

References

- Aletras, N., Tsarapatsanis, D., Preoțiu-Pietro, D., & Lampos, V. (2016) Predicting Judicial Decisions of the European Court of Human Rights: A Natural Language Processing Perspective. *Peer Computer Science*. Retrieved from: <https://peerj.com/articles/cs-93/>
- Arkhipov, V. V., & Naumov, V. B. (2017). Artificial intelligence and autonomous devices in the context of law: on the development of the first law in Russia on robotics. *Proceedings of SPIIRAN*, 6.
- Bostrom, N. (2016). *Artificial Intelligence. Stages. Threats. Strategies*. Moscow: Mann, Ivanov and Ferber LLC.
- Kelly, K. (2017). *Inevitably. 12 technological trends that determine our future*. Moscow: Mann, Ivanov and Ferber LLC.
- Kiselev, A. S. (2017). The history of the origin and formation of the idea of e-government in public affairs in Russia and abroad: a comparative legal aspect. *Bulletin of the Saratov State Law Academy*, 4, 39–45.
- Ponkin, A. V., & Redkina, A. I. (2018). Artificial intelligence from the point of view of law. *Bulletin of RUDN, ser. Jurisprudence*, 91–109.
- Ross, A. (2017). *The industry of the future*. Moscow: AST Publishers.
- Vasiliev, A. A., Shpoper, D., & Mataeva, M. Kh. (2018). The term “artificial intelligence” in Russian law: doctrinal analysis. *Law linguistic*, 7–8, 33–44.