Law nature of artificial intelligence

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ABSTRACT

The article studies the essence of artificial intelligence from the standpoint of the jurisprudence. Based on the discursive-communicative methodology, it analyzes the ontological aspects of the development and functioning of artificial intelligence in modern law reality. It is concluded that artificial intelligence has a dichotomous law nature. On the one hand, as a tool for working with information, it has the features of an object of law. On the other hand, it itself produces information and participates in communication, in terms of its qualities approaching the subject of law. This implies a reassessment of the law system as a whole due to the possibility of the formation of norms by artificial intelligence itself. The legal definition of artificial intelligence at the moment is intended to construct the appropriate relationship and requires further clarification. We propose to introduce a new category of subjects of law, which can be called a "cyber-face" and which will refer specifically to artificial intelligence, as opposed to the concept of "digital person" used to designate a human (individual) as a subject of law in virtual reality.

1. Introduction

The fourth industrial revolution and the transition to the information society are increasingly leading not only to technization, but also to the digitalization of social and legal reality. This process especially accelerated during the COVID-19 pandemic, the forced social restrictions of which contributed to the transfer of social communication into the virtual space, and the interaction in which is increasingly replacing traditional forms of communication.

Meanwhile, more and more objects equipped with artificial intelligence appear; they are capable of not only mechanically solving tasks assigned to them by a person, but also taking their own actions, participating in legal communication, although they are determined by complex work algorithms [1]. Having sufficient ability for self-learning, suitable for use and adaptable to the outside world, artificial intelligence is increasingly affecting the human consciousness and behavior [2].

Despite the fact that the category of "artificial intelligence" has been relatively recently introduced into scientific circulation, its widespread use in all spheres of life has attracted not only of representatives of technical science, but also of the humanities. First of all, an attempt is made to determine the content of artificial intelligence and to reveal its significance in the life of society [3]. Scientists are actively developing the perspective of using artificial intelligence in the legal life of citizens [4] and the state [5], the legal regulation of social relations arising in the process of developing and using artificial intelligence [6]. The introduction of artificial intelligence into the field of law enforcement [7] has led to the possibility of applying legal liability measures to it [8] and ensuring cyber security [9].

The intensification of scientific research on artificial intelligence in the legal context necessitates the identification of its legal nature, the content of which will determine the solution of other issues.

The goal of this article is to study the ontological aspects of the development and functioning of artificial intelligence in modern legal reality.

Methodologically, the article is based on the postclassical research paradigm, which shifts the focus of the study of any phenomenon of legal reality into the interdisciplinary plane. Among the many postclassical theories, the one is discursive-communicative theory developed by Habermas Yu. [10] and adapted by Polyakov A.V. [11] and Chestnov I.L. [12] for the study of the legal reality of modern Russia. Focusing on the study of not only legal, but also social law, this theory allows us to take a different look not only at the legal nature of traditional subjects of law, but also consider other applicants for this status, as well as artificial intelligence. The use of methods of deconstruction and phenomenological reduction, in turn, makes it possible to reveal the hidden essential features of artificial intelligence, more precisely, those qualities that are implied by the phenomenon designated by the corresponding term.

2. Legal aspects of the definition of "artificial intelligence"

Artificial intelligence as a phenomenon of the reality surrounding a human is currently the object of study of a whole range of sciences, both natural and technical, and social and humanitarian. The final point in identifying its essential features has not yet been set, and this is unlikely to happen in the predictable future due to the dynamics of events going on around artificial intelligence. Legal science does not stand aside and explores the latter based on the place and role that it can and does occupy in legal reality. Moreover, the normative consolidation of the concept of artificial intelligence, as well as several other aspects of the legal regulation of relations with its involvement, is already represented in the norms of positive law.

Understanding law in an integrative sense involves the consideration of not only positive legal regulation, but also focusing on other legal regulators [13]. However, from our point of view, in this field, in essence, there is no ordinary legal regulation, which can be taken precisely for legal regulation. Those developing usual customs are very vague. Furthermore, regulation is required in areas where the public law type prevails, which, in turn, involves state intervention. Judicial practice, for obvious reasons, also lacks. It can already appear on the basis of the appropriate application of the norms of positive law. Therefore, the tone in legal regulation will be set by normative legal acts of federal authorities: at the first stage - by the President of the Russian Federation and the Government of the Russian Federation, and then by federal laws adopted by the legislature and promulgated by the President of the Russian Federation.

In this regard, we believe that the study the issues of artificial intelligence in philosophical and legal terms seems relevant, based on the fact that the legal mediation of its application and further possible independent activity is implemented not only on the basis of positive legal regulation, but will affect such parties, as "soft law", ethical and legal regulation, as well as customs of a legal and other nature. The legal set of rules governing relations in the field of artificial intelligence is in the process of formation and is subject to construction by significant acts, i.e., product developers, relevant government agencies, etc.

It is philosophical and legal research that allows us to explore artificial intelligence from the standpoint of both an object and a possible subject of law, as well as to pose a number of problems related to the identification of fundamentally new elements of the legal system, legal reality, the multi-level construction of the latter, including using the capabilities of artificial intelligence.

In the absence of a definition of artificial intelligence in federal legislation, the legal definition of this phenomenon is given in strategic planning documents, which are becoming increasingly important in the modern legal system of Russia and are considered in legal regulation not only as a legal doctrine, but also as normative legal acts of direct accomplishment [14]. Thus, the National Strategy for the Development of Artificial Intelligence for the period up to 2030, approved by Decree of the President of the Russian Federation No. 490 dated October 10, 2019 [15], defines artificial intelligence as follows: "artificial intelligence is a set of technological solutions that enables simulating human cognitive functions (including self-learning and search for solutions without a predetermined algorithm) and obtaining results of specific tasks that are at least comparable with the results of human intellectual activity. The complex of technological solutions includes information and communication infrastructure, software (including which uses machine learning methods), processes and services for data processing and search for solutions" (p. "a" of article 5).

Despite the fact that this definition is specified in the Strategy approved by the Decree of the President of the Russian Federation, i.e., formally should be considered as a by-law normative legal act, by virtue of the norm of Part 3 of Art. 80 of the Constitution of the Russian Federation [16], referring to the powers of the President of the Russian Federation, "determining the foundations of domestic and foreign policy", this definition can be considered as a direct instruction to subjects at all levels of legal reality how to understand this legal phenomenon [17]. At the same time, it is important to take into account that this legal definition has not only ontological, but also axiological and epistemological significance. On the one hand, this definition can be considered as a specific conventional solution to the discussion about the nature of artificial intelligence, creating a uniform value attitude to this phenomenon at the level of lawmaking and law enforcement, as well as constructing a uniform legal goal for the formation of a regulatory framework for regulating this phenomenon. On the other hand, this definition, although drawn up according to the requirements of legal technique, is a generalization of technical solutions to this problem and is intended to answer the question not only about the content, but also about the essence of artificial intelligence both in legal and social, and in physical reality.

Obviously, the definition enshrined in the Strategy is given "for growth", since in the future it is supposed to adjust the definition based on new technical data, as well as taking into account the understanding of the relevant processes in legal, primarily judicial practice. This model is justified by the need to work on the legal norms to regulate numerous relations in this field. In the future, the concept of artificial intelligence, of course, will be improved and constructed based on the current situation, and possibly will find consolidation at the level of federal law.

The Strategy also makes an attempt to formulate the principles of regulation of relations, which indicates the use of the method of constructing legal reality. That is, legal regulation as such in its final form has not yet taken place, but the principles already exist. Thus, the corresponding programming of further regulation takes place [18]. In this regard, the design has both advantages and disadvantages. On the one hand, it allows planning and directing the legal regulation of relations in a certain course, and on the other hand, it can pose obstacles if future development trends are determined incorrectly; this is especially important in the context of unpredictability and the possibility of predicting only probable future scenarios. In addition, the problem of mythologization of reality arises if the desired is too clearly presented as reality, specifically for the sake of certain socio-economic, political and other goals. In this case, virtual reality is doubling and tripling: along with virtual reality in the usual sense, a reality of a different order forms, as a system of ideas about what functions artificial intelligence apparently can perform (for example, the idea of a possible complete digitalization of the human personality and transferring it to other bearers, i.e., the body of another person or to the information storage, which at the moment is largely very phantasmagoric). This problem is definitely far-fetched due to the fact that if people tend to believe in the relevant circumstances, the consequences will be perceived as real (the well-known theorem by Thomas W.).

Some contradictions arise that are inherent in the principles postulated above. Thus, the principle of protecting human rights is dissonant with the principle of employment: obviously, the introduction of artificial intelligence technologies leads to massive layoffs of workers performing organizational functions. The principle of technological sovereignty and the principle of competition are also in dissonance: the most tangible competition occurs at the international level, in competition with other countries, but the current situation requires the protection of sovereignty. Contradictions in this regard will grow gradually, which will require fundamentally new views on solving the problem.

It should also be noted the Concept for the development of regulation in this area, approved by the Government of the Russian Federation on August 19, 2020 [19]. Unfortunately, during these two years, there have not been significant changes in the legislation that were supposed within the framework of this Concept.

The search for the optimal model of legal regulation of artificial intelligence and the definition of its legal nature implemented in Russia were in the general direction of doctrinal appeal to this problem in the world. The actively ongoing fourth industrial revolution has put on the agenda the issue of not just increasing the effectiveness of the legal regulation of artificial intelligence, but giving it legal personality. This question was first raised in 2014 when it was announced that a Hong Kong venture capital firm had appointed computer software Vital to its board of directors, and then updated in 2017 when Saudi Arabia granted

"citizenship" to the humanoid robot Sophia, and online the system with the personality of a seven-year-old boy received a "residence" in Tokyo [20]. At the same time, the question was raised about the rights, duties and responsibilities of artificial intelligence [21]. Two fundamentally different doctrinal approaches to determining the legal personality of artificial intelligence were formulated: the definition of the legal personality of artificial intelligence by analogy with the legal personality of animals [22] or the endowment of artificial intelligence with legal personality as a specific form of a legal entity [23].

This has led to the intensification of law-making activities in this area not only at the national, but also at the international level. In particular, on February 16, 2017, the Resolution of the European Parliament was adopted, declaring the need to endow complex artificial intelligence with legal personality in the future [24]. However, as P. Morhat notes, the question of the legal personality of artificial intelligence cannot be resolved unambiguously due to fundamental differences in its nature [25]. Moreover, the literature emphasizes that the decision-making processes through artificial intelligence should be based on understanding and compliance with existing civil and criminal laws, as well as protect against any harm it could cause to people [26]. The consequence of this was the adoption of a number of decisions by the European Commission in 2019 2021 on the extension of responsibility for acts committed by artificial intelligence not only to its owners, but also to developers [27]. A similar situation has developed in other regions. Many countries have also adopted the concepts of the development of artificial intelligence, including its legal regulation issues. First of all, it is necessary to note China, Japan, the USA and Canada [28]. Despite the fact that these documents raise the issue of endowing artificial intelligence with legal personality [29], to date this issue has not yet been unequivocally legally resolved [30].

3. Artificial intelligence in physical, social and virtual realities

The Russian legal system, based on the general directions of the legal regulation of artificial intelligence, views artificial intelligence as a kind of technical tool (machine) that seeks to understand the complex mental processes that the human mind performs during thinking, and then convert these thinking processes into corresponding arithmetic operations such way to enhance the computer's capacity to solve complex processes.

Artificial intelligence is a set of methods, techniques, technologies and tools, including both hardware and computer programs, that implement one, several or all cognitive functions corresponding to human cognitive functions. It is a human-designed device or computer program for receiving, processing and applying information and generating "skills" analogous to actions consciously performed by a human. The objective of creating artificial intelligence, and this is represented in the National Strategy for the Development of Artificial Intelligence for the period up to 2030, is to replicate (simulate) the work of the human brain, intelligence, mental activity, etc. due to the reproduction of the cognitive function equivalent/identical in terms of criteria, characteristics and indicators of human cognitive functions.

From our point of view, artificial intelligence covers several realities at once. Firstly, this is a physical reality when we talk about a machine, an information system, a result of human activity. In this regard, natural sciences as physics, cybernetics, mathematics, etc. focus on it. Secondly, this is a social reality, since artificial intelligence generates many social relations, both legal and ethical, as well as ordinary ones. Legal reality simultaneously acts as a part of social reality. Thirdly, this is a virtual reality, that is, an imaginary, artificial reality, which, as noted above, can be a reflection of natural reality, or construct something completely new.

The absence of a clearly defined articulation of the legal definition of "artificial intelligence" transfers this problem from an exclusively normative level to a doctrinal one, causing a discussion in science not only about the content of this concept, but also about its definition. There are two main approaches to the definition of this concept, developed in science, which can be somewhat conventionally designated as "technological" and "psychological". Both approaches comprehensively cover the different realities in which artificial intelligence is placed. Within the framework of the first one, Yastrebov O.A. defines it as: "the result of human activity, which is a complex set of communication and technological relationships, capable to think logically, manage own actions and correct own decisions in case of changing external conditions" [31]. As an example of the second approach, we can cite the definition given by Ponkin I.V. and

Redkina A.I.: "artificial intelligence is an artificial complex cybernetic computer-software-hardware system (electronic, including virtual, electronic-mechanical, bioelectronic-mechanical or hybrid) with a cognitive-functional architecture and its own or relevantly available (attached) computing capacities of the required volumes and speed, which includes:

- properties of substantivity (including a certain subjectivity, including as an intelligent agent) and autonomy in general, as well as elaborative (having a tendency to improve) operationality;

- high-level capabilities to perceive (identify, analyze and evaluate) and model the surrounding images and symbols, relationships, processes and environment (situation), self-referentially make and implement their decisions, analyze and understand their own behavior and experience, independently model and correct action algorithms for themselves, reproduce (emulate) cognitive functions, including related to learning, interaction with the outside world and independent problem solving;

- ability to self-referentially adapt own behavior, autonomously self-learning in depth (to solve problems of a certain class or more wide one), to homologate itself and own subsystems, as well as to develop homologated "languages" (protocols and methods) of communication within itself and with other AIS, substantively perform certain anthropomorphic-emulating (conventionally attributed to the prerogative of a person (reasonable being)) cognitive (including cognitive-analytical and creative, as well as associated with self-awareness) functions, take into account, accumulate and reproduce (emulate) experience (including human experience)" [32].

We assume that the virtualization of legal discourse and the expansion of the limits of legal regulation not only to the physical world, but also to the virtual space necessitate the rejection of the exclusive sociality of the norms of law. The foregoing applies not only to artificial intelligence, but also to some other quasi-subjects (for example, in the case of creating zombie people in the future for use in difficult conditions, with cloning, which can be implemented regardless of the existence of relevant legal prohibitions), as well as accounting the interests of living beings (animals). Obviously, such norms cannot be considered either exclusively social or purely technical. The increasing strengthening of the role of artificial intelligence can lead not only to the formation of a special subsystem of legal norms by the human

community, but also to the formation of some new norms by artificial intelligence itself, which will entail the question of the status of such norms and their correlation with both the system of law and the legal system, as well as the search for their place in the legal reality, as a whole.

In this regard, we can raise the question of both the formation of a special virtual reality by artificial intelligence, and its impact on the already existing social reality through constructing and transforming it in the direction that will be assessed by artificial intelligence as the most appropriate. Simultaneously, in parallel, the question arises in whose interests the corresponding "opinion" will be formed: is it the interest of society or some interest of the information system itself, which strives for independence from human control.

When defining facts and phenomena of a technical or mixed character, it is necessary to use a different legal language, which includes not only technical (technical and legal) terminology, but also concerns construction on other ontological and axiological grounds. Based on this, this article uses the category "artificial intelligence" in the following sense: "a complex information system based on artificial neural networks capable of processing "big data", creating and using its own knowledge bases, decision models, algorithms working with information and determining ways to achieve the tasks set both by a human and independently. If we study the concept of artificial intelligence by the deconstruction method, then we can, in particular, come to the conclusion that the use of this term to refer to the corresponding phenomenon does not seem to be the most successful: intelligence as a term is used to refer to the capabilities of complex neurophysiological systems in humans and, in some cases, in animals. When we talk about information systems, they are known to be built on other grounds, which, on the one hand, does not make it possible to fully reproduce the features of a human and other living organism, and on the other hand, it implies other schemes for setting and solving problems, which terminologically may require a different designation. From the point of view of phenomenological reduction, intelligence can also be reduced to a certain dynamics of processes involving neural connections of living beings capable of self-development and self-learning, reflection, etc. If the mechanism of its action in living beings is not fully determined by science, then how the creation of artificial intelligence is

possible in this sense? Or it should not be about intelligence, but about some fundamentally different phenomenon. Nevertheless, the substantivity of artificial intelligence, as noted above, is also manifested to some extent at the present moment, which entails a number of questions regarding the definition of its place and role directly in legal reality.

4. The status of artificial intelligence in legal reality

The expansion of the use of artificial intelligence in both the private and public spheres raises concerns about the transparency of the activities of such systems, especially when decisions are made by the systems themselves, not only among citizens, but also among practicing lawyers. Discussions about the possibility of using artificial intelligence in law enforcement practice can serve as an example [33]. As artificial intelligence develops and becomes more complex, it becomes more and more difficult for a human to understand the features of its internal functioning, which gives rise not only to the fear of the unknown, traditional for human consciousness [34], but also to the fear that the transition to a self-learning and self-organizing system will lead to the loss of human's position in the world [35].

First of all, it is necessary to identify the problem of ambiguous interpretation of artificial intelligence as an object and/or subject of law. In the first case, we are talking about the fact that artificial intelligence is a benefit, about which the subjects of law enter into legal relations with each other, i.e., artificial intelligence can be sold, exchanged, entered into other transactions with respect to it, etc. In the second case, we should talk about the possibility of endowing artificial intelligence with elements of legal personality.

The key arguments in favor of the fact that artificial intelligence by its nature tends to objects of law (legal relations) is, firstly, that artificial intelligence is the result of human activity, in relation to which a human has certain rights and obligations; and, secondly, in the current law, the subject of liability for damage caused by artificial intelligence is an individual or legal entity that is (recognized as) the author (creator) of artificial intelligence. As an object of law and as a result of human intellectual, creative activity, artificial intelligence is subject to legal protection. Art. 128 of the Civil Code of the Russian Federation (part one)

[36] include the results of intellectual activity to the objects of civil rights, in particular. They, in turn, are detailed in Art. 1225 of the Civil Code of the Russian Federation (part four) [37]. Specifically, in relation to the analyzed topic, one can name computer programs, databases, topologies of integrated circuits. It seems that the objects related to artificial intelligence and its activities should get special consolidation in the indicated articles of the Civil Code of the Russian Federation.

In essence, artificial intelligence is able to make its way from the object to the subject of law [38]. Moreover, this path is not the first in history. Formerly, this happened, for example, to slaves. However, here the situation is different. The fact is that artificial intelligence combines the creation of a human with a possible independent subjectivity. When the moment comes, as a result of which artificial intelligence begins to act as an independent entity that makes decisions and is responsible for its actions, science cannot yet definitively determine, but this will have to happen in a certain period of time.

Although artificial intelligence, especially objectified in the object of robotics, is able to communicate with a person and the outside world, primarily through information messages, in the existing social reality, regardless of a human, it is endowed with the ability to influence reality and even transform it. At the same time, it should be taken into account that the rapid improvement and expansion of the functionality of artificial intelligence is increasingly leading to the creation of decision-making opportunities that were not set by the original algorithms. This is specifically true for self-learning systems [39].

Perhaps we should agree that artificial intelligence, depending on its technical nature, will have a different status [40]. Depending on what is meant by it, in some cases, it will be an object, and in others a subject [41].

At a minimum, we can talk about two types of artificial intelligence: artificial intelligence, which performs the functions of processing, refining or reproducing information, and artificial intelligence, which itself generates information and participates in communication. The former acts as an object of law, whereas the latter can be viewed as a subject. Although this assumes that artificial intelligence is endowed with partial capacity based on autonomy [42], we are not talking about equalizing the concepts of "human" and "artificial intelligence". The latter at this stage of technical and social development cannot be

equated with human either biologically or socio-communicatively.

The subjectivization of artificial intelligence rather means the development of modern not only sectoral, but also theoretical jurisprudence towards the recognition of a new type of subject of law, along with individual and collective, which can be generically called a "cyber-entity".

The category "cyber-entity" can be defined as follows: a **cyber-entity** is an automated machine capable of imitating human cognitive functions (including self-learning and searching for solutions without a predetermined algorithm), endowed with the ability to realize the actual side of events, realize the social danger of own action or inaction, and their consequences, manage their behavior and have the opportunity to choose (the presence of several options for behavior), giving it the opportunity in legal communication (to be involved in legal interaction with other persons) (Fig. 1).
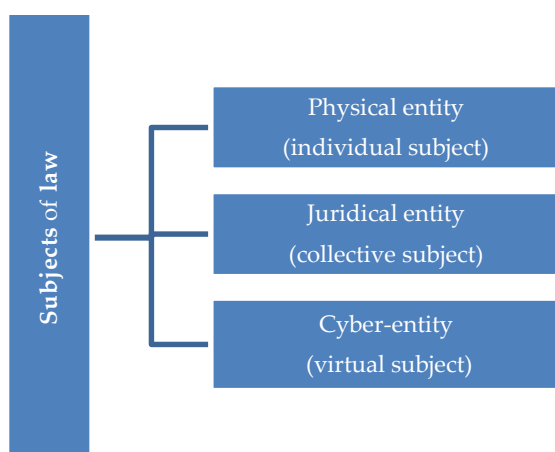

Fig. 1. Subjects of law

5. Prospects for the development of the legal system and legal reality in the context of strengthening the role of artificial intelligence

The introduction of the concept of artificial intelligence into legal regulation is largely complicated by the fact that the modern legal system has a pronounced anthropocentric character. This makes it necessary to revise not only the norms of law, but also legal values. First, legal science and practice must abandon the anthropologism of legal knowledge and the anthropocentric approach to the legal system as a whole, which is characteristic of the postmodern era. Anthropocentrism idealizes the involvement of

a person in the formation of legal reality, sometimes not taking into account that its development occurs at the will of individuals endowed with resources and showing will, while the rest only use the formed rules, automatically and without reflection of the proper level. Furthermore, artificial intelligence will become the second center for the formation of norms, assessment of situations, etc.

Secondly, it is necessary to expand the limits of legal regulation, to include in it not only social, but also technical norms, as well as those rules that artificial intelligence will potentially form as a cyber-entity. At the same time, it is necessary to resolve the issue of delimitation/synthesis of relations such as "human - cyber-entity" and "cyber-entity - cyber-entity", as well as identify potential threats that artificial intelligence can cause both in real and virtual world. The most global threat is manifested in the possible withdrawal of artificial intelligence from human control, followed by the establishment of virtual control of artificial intelligence over society with the possible imposition of some kind of its own will on the latter - if it becomes possible for self-identification and reflection by artificial intelligence.

Thirdly, the question should be raised not about the secondary nature of artificial intelligence in relation to humans, but about equality, and in some cases, superiority not only in an intellectual sense, but also from a moral standpoint. In particular, if a human is burdened with a number of physiological and other needs, using immoral means to satisfy them, then artificial intelligence is free from such a choice. Moreover, the problem of ownership of things and other objects created by artificial intelligence should be defined.

Fourthly, it is necessary to decide whether the cyber-entity is a subject of the existing legal system or there should be an independent legal system in which artificial intelligence will be the main subject of law [43]. In the latter case, the problem of the sources of such a legal system also needs to be resolved.

Fifthly, it is necessary to resolve the issue of the identity and self-identification of artificial intelligence, the possibility of its subjectivity in the virtual and physical world. It should be taken into account that the very mechanism of social control and the mechanism of social regulation will be subject to rethinking. These mechanisms involve only the participation of people, whereas the emergence of artificial intelligence as a quasi-subject fundamentally changes the situation:

artificial intelligence itself begins to be used in the control mechanism and the regulation mechanism as a detail, and subsequently becomes an active element that constructs reality itself. As a result, we should either recognize the transformation of social control and social regulation, or raise the question of the formation of a new type of control and regulation - supra-social, non-social, possibly virtual one - an appropriate terminological study of the issue is required.

In relation to the existing legal system, first of all, the issue of objects of civil law should be regulated, as well as legal personality in the case when artificial intelligence is capable to make decisions and bear responsibility for them. The most important issue of determining the legal nature of artificial intelligence is the definition of the subject of legal liability in case of harm to a human (society). It seems necessary to develop normative legal mechanisms that regulate the norms of legal liability in the event of harm to a human, including the possibility of establishing liability between various subjects of activity, as well as the establishment of a specific mechanism for guaranteeing and insuring actions, both directly carried out by artificial intelligence in virtual reality, and carried out other subjects of law in social reality in connection with the implementation of artificial intelligence solutions.

If artificial intelligence is to be held legally responsible for its actions, then it must have a physical, plus legal and digital identity. In order for artificial intelligence to be considered a subject of law, it should be noted that it cannot be recognized immediately after its creation as a finished and ready-to-use product of human activity, because even a human, as the most important value and developed being in the world, experiences a development path, which is enshrined in legislation. Therefore, artificial intelligence must go through stages of development to fully function in society. Correspondingly, in order for artificial intelligence to be a full-fledged subject of law, the legislation must have a clear procedure for recognizing artificial intelligence as a subject of law, and then there will be no problem that artificial intelligence can enslave humanity, because it will recognize the rule of law and have an exhaustive list of rights and responsibilities.

Unlike other types of subjects of law, the behavior and activities (functioning) of a "cyber-entity" should be regulated not only by legal, but also by technical and other kinds of norms (as indicated above, they can be specific), which should determine the rights, obligations and responsibility of a cyber- entity both in interaction with other cyber- entities, as well as with individual and legal entities.

First, it is necessary to determine which of the existing legal norms can be extended to cyber-entities. In particular, in the field of private law regulation, a cyber- entity performing human functions in the process of providing services or performing work, although it does not replace the latter, may well be viewed as a subject of legal relations within the appropriate limits of civil law regulation.

Secondly, what new legal norms should be adopted to streamline communication between participants in legal interaction involving a cyber-entity? In this case, a cyber- entity can act both as an independent subject of law and as a representative of an individual or legal entity.

Thirdly, the legal status should be provided to the technical norms that regulate the creation and functioning of artificial intelligence. For example, "three laws of robotics" proposed by the famous science fiction writer Isaac Asimov [44].

Despite the need for a prompt solution to the identified problems (as well as many others), activity on the part of legislators has not yet been detected. In any case, the fundamental issues of legal personality and objects of civil rights in relation to artificial intelligence are currently far from being resolved. Simultaneously, certain shifts are noticeable in a number of separate areas of the application of artificial intelligence: for example, in the field of electronic justice, as well as the provision of state and municipal services in a digital format. The use of artificial intelligence in justice [45] can take place in several stages, starting with organizational support, then assisting in the performance of a number of judicial functions, for example, in assessing evidence, and ending with the transfer of a number of functions of justice in general - for example, drafting court orders, executive sheets, the formation of court documents on the same type of cases.

It should be noted that scientists are already proposing developments, in particular, the Model Convention on Robotics [46], the Digital Code of the Russian Federation [47], as well as a number of changes to civil law. Furthermore, we often talk about the creation of cyber-legislation as an independent branch [48]. The rapid development of products of intellectual activity, at this stage, primarily as objects of civil rights, but in some cases as subjects, seems to require an increase in the

activity of legislative work.

However, the recognition of artificial intelligence as a subject of law gives rise to other systemic issues. First, in addition to traditional justice, "mixed justice" should be designed. This is aimed at resolving disputes between individuals, legal entities and cyber- entities, and "artificial intelligence justice" (cyber-justice), which will include forms of conflict resolution between cyber-entities [49]. The latter also includes issues of ensuring cybersecurity, in particular, counteracting cyber- entities representing stability and law and order for social development. Additionally, if mixed justice can be created through traditional legal mechanisms, then artificial intelligence justice should probably be focused on the use of fundamentally different communication mechanisms that are currently absent in legal reality. Secondly, the question arises about the possibility of developing digital ethics as a set of moral norms that should guide in their activities not only the person who creates artificial intelligence, but also the cyber-entity itself [50].

Moreover, digital ethics affects different layers of reality. On the one hand, these are the attitudes of people to each other about artificial intelligence. On the other hand, it is the relationship of a person with artificial intelligence in the form of a cyber-entity with signs of legal personality. Finally, it can be the relationship between cyber- entities and, in general, the norms that the artificial intelligence system will directly form. Most likely, this kind of norms will significantly differ from human ethics - in the case that artificial intelligence gets the opportunity to independently develop norms and recognize them as universally recognized among information systems. This looks unattainable so far, and the ethical component is put into programs by developers, that is, by humans. However, the future cannot be accurately predicted, and there will be problems in identifying such norms and their correlation with both legal and ethical norms.

6. Conclusion

Thus, at the present stage of legal development, it is not possible to unambiguously determine the legal nature of artificial intelligence, since this phenomenon does not represent a single whole. Legal definitions of artificial intelligence are given in strategic planning documents and at the moment are not finalized, although they play an axiological role, suggesting a certain assessment of the phenomenon from the standpoint of legal

regulation. Artificial intelligence is immersed in several realities simultaneously, i.e., in physical, social and virtual realities. From the point of view of legal reality, on the one hand, artificial intelligence that performs the functions of storing, processing, processing or reproducing information has the features of an object of law. On the other hand, artificial intelligence, which itself generates information and is involved in communication, approaches the subject of law in its qualities. This implies the need for changes in the legal system. We proposed to introduce a new category of subjects of law, which could be called a cyber-entity and would refer specifically to artificial intelligence, as opposed to the concept of "digital person" (electronic personality, avatar), used to designate a human (natural person) as a subject of law in a virtual environment (metaverse). Recognition of artificial intelligence as a subject of law requires a comprehensive approach, including, in particular, the adoption of special legislation in this area, determining the possible liability of artificial intelligence and ensuring legal control over the activities of artificial intelligence. There are also a number of questions of a doctrinal nature that need to be solved, in particular, about the nature of the relevant norms, which concern not only the relationship between people about artificial intelligence, but also the relationship between potential subjects of artificial intelligence, as well as the formation of norms by the latter. In this regard, the sociality of the norms of law can be revised, since the law invades spheres with the participation of a different kind of subjects non-related to people.

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