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ARTIFICIAL INTELLIGENCE IN JUSTICE: LEGAL AND PSYCHOLOGICAL ASPECTS OF LAW ENFORCEMENT**

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The subject. Artificial intelligence is considered as an interdisciplinary legal and psychological phenomenon. The special need to strengthen the psychological component in legal research of artificial intelligence and its introduction into the practice of law enforcement and justice, in particular, is substantiated.

The main goal of the study is to confirm or refute hypothesis that AI may be implemented in justice and to substantiate the legal limits of such implementation.

The methodology. Based on the comparison of the current legislation, the practice of its application, and other empirical data, internal and external legal and psychological factors of legal regulation and the use of artificial intelligence in jurisprudence and judicial proceedings are identified.

The main results, scope of application. The analysis of legal and doctrinal definitions of artificial intelligence in jurisprudence has shown that their defining and integral part is relationships that are the result of psychological practices and the subject of psychological science (internal factors). Legal studies of artificial intelligence are based on a psychological conceptual apparatus, all of them legally describe artificial intelligence, first of all, as a psychological phenomenon and build an analogy between the psychology of a living intelligent subject and an inanimate object, humanizing the latter. The federal legislator is also following the path of using the psychological conceptual apparatus. Such categories like human cognitive functions and intellectual activity are applied in Russian Federal Law "On conducting an experiment to establish special regulation in order to create the necessary conditions for the development and implementation of artificial intelligence technologies in the subject of the Russian Federation - the federal city of Moscow and amending Articles 6 and 10 of the Federal Law "On Personal Data". The legal and psychological analysis of the practice of using elements of artificial intelligence in corporate governance, justice, labor relations, social insurance, electoral procedures has been subjected.

The conclusion is substantiated that an indispensable condition for the introduction of artificial intelligence and its elements into justice is trust on the part of the disputing parties and the court. Such trust is provided with a real possibility of verifying the actions and decisions made with artificial intelligence by psychologically acceptable and legally formalized methods (external factors). The use of artificial intelligence in law enforcement in general and justice in particular is possible in two directions: (1) solving problems related to the approximation of specialized artificial intelligence systems in legal proceedings to human capabilities and their integration to enhance intelligence; (2) creating artificial intelligence, which is the integration of already created elements of artificial intelligence into a single system capable of participating in justice, but does not have the properties of free will and does not acquire legal personality. Law enforcement using artificial intelligence should comply with the principles enshrined in the European Ethical Charter on the Use of Artificial Intelligence in Judicial Systems and their environment, the provisions of which should be implemented in domestic legislation, having previously been revised in accordance with the national legal tradition.

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1. Introduction

The concept and legal features of artificial intelligence (hereinafter - AI), its application in various aspects of jurisprudence - from training to replacing judges in civil and criminal cases - is one of the most discussed topics in legal science today [1; 2; 3; 4; 5; 6]. More popular among legal scholars are, perhaps, only general and applied issues of digitalization in law [7; 8; 9; 10; eleven; 12; 13].

The issue is largely technological. Lawyers in the humanities understand this, and recently they are increasingly involved in the preparation of publications and discussion of problems of practicing engineers or scientists with a technical specialization [14]. Modern science as a whole is becoming more and more interdisciplinary [15].

But the further the author plunges into this problem, the more comes the understanding of how great the importance of the introduction of AI in legal practice and, in particular, in justice, the accompanying legal and psychological problems [16; 17; 18; 19; 20].

2. Internal (substantive) legal and psychological characteristics of artificial intelligence in law enforcement

Take, for example, the basic term - artificial intelligence. Its normative definition is contained in GOST R 43.0.5-2009: “Artificial intelligence is a simulated (artificially reproducible) intellectual activity of human thinking” (National Standard of the Russian Federation. Information support for technology and operator activities. Information exchange processes in technical activities. General provisions 3.17) [1], but it also raises more questions for lawyers than answers.

Developers of Federal Law No. 123-FZ dated April 24, 2020 “On conducting an experiment to establish special regulation in order to create the necessary conditions for the development and implementation of artificial intelligence technologies in the subject of the Russian Federation - the city of federal significance Moscow and amending Articles 6 and 10 of the Federal Law “On Personal Data” [2] (Article 2) considers artificial intelligence as “a set of technological solutions that allows simulating human cognitive functions (including self-learning and finding solutions without a predetermined algorithm) and obtaining results when performing specific tasks that are at least comparable with the results intellectual activity of man.

In contrast to the GOST cited above, the named Federal Law is about imitation, and not modeling (reproduction) of human intellectual (cognitive) activity, and this is a more accurate formulation. It is possible to imitate the cognitive functions of a person, imitate them when creating an appropriate artificial system, but it is impossible to reproduce (simulate - GOST uses these terms as synonyms) with the current level of technological development.

Another difference between the two legal definitions, which I would like to dwell on briefly, is that AI must imitate (reproduce - simulate). In GOST, this is “intellectual activity of human thinking”, and in the Federal Law it is “human cognitive functions”. Both terms are multi-sectoral and ambiguous, it is difficult to determine exactly what content the authors of the regulations put into them. Perhaps the use of the word "cognitive" in the law is connected only with the desire to avoid repetition and definition of the concept of intellect through intellect, i.e. as a more suitable synonym in accordance with the rules of the Russian language. Perhaps the concept of "cognitive functions" is applied as a broader one, including intellectual activity. Considering that the analyzed Federal Law is of a framework nature and is aimed at conducting a complex and long-term (five years) socio-legal and technological experiment, the result of which is unknown, the developers used an ambiguous term in order not to limit the actual scope of this experiment. By imitating cognitive functions, anything can be imitated. And what cognitive functions of a person will be able to “simulate” when developing AI will be shown by the final

[1] Approved Order of the Federal Agency for Technical Regulation and Metrology dated December 15, 2009 No. 959-st. URL: https://docs.cntd.ru/document/1200079262 (accessed December 16, 2022)

[2] Collection of legislation of the Russian Federation. 2020. No. 17. Art. 2701.

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empirical data, which, before summing up the results of the experiment, the legislator does not dare to predict reliably.

It is easy to see that the use of both normative concepts of AI in legal practice is impossible without knowledge in the field of psychology and giving these psychological patterns a legal form.

The situation is exactly the same with the domestic scientific legal conceptual apparatus.

P.M. Morhat describes AI as a fully or partially autonomous self-organizing or self-organizing computer-hardware-software virtual or cyber-physical system that has the ability and ability to think, self-organize, learn, make decisions independently [23, p. 69].

According to V.A. Laptev, the defining difference between AI and a conventional robot is the presence of thinking or the absence of it [24, p. 84].

You can give a lot of approaches to the definition of the concept of AI in legal research [25, p. 67; 26, p. 11; 27, p. 90], but all of them are based on a psychological conceptual apparatus, all of them legally describe AI primarily as a psychological phenomenon and build an analogy between the psychology of a living rational subject and an inanimate object, humanizing the latter.

3. External legal and psychological factors of artificial intelligence in law enforcement

Much greater restrictions on the use of strong AI are external philosophical and psychological aspects, how a person will perceive the emergence of an artificial personality that makes decisions, creates, self-learns and reproduces itself not according to algorithms written by a person that does not allow the machine to overcome the restrictions imposed on it by the creator, but with the help of mechanisms known only to AI, which they also developed.

The introduction of strong artificial intelligence into everyday practice, and even more so justice, is impossible today either technically or psychologically. Another thing is if we direct our efforts to weak AI, improving the existing ones and creating new intelligent systems with narrow areas of application and combining such systems into a single whole to solve global applied problems.

Elements of AI are being introduced into the practice of corporate governance, which has an unconditional legal form. For example, the digital intelligent assistant Autodesk Construction IQ [28], using machine learning methods, analyzes data on the quality and safety of construction. In 2014, Hong Kong-based venture fund Deep Knowledge Ventures[3] included a self-learning computer program on its board of directors. If the AI's conclusions did not agree with the opinions of other directors - members of the board, the analysis continued with additional information, until the decision became unanimous.

A curious example is the granting of citizenship of Saudi Arabia to a humanoid robot designed in China [29]. I do not think that this gives reason to talk about the emergence of "cyber-physical relations that require legal regulation" [24, p. 82]. After all, even for two millennia, horses did not become subjects of law by virtue of giving the stallion Roman citizenship, and subsequently the status of a senator [30, p. 122-124].

Research is being conducted aimed at the application of new AI technologies and in relation to litigation[4] [31].

For any introduction of AI and its elements, the issue of trust is of paramount importance[5], which is mostly achieved by psychological methods [32].

An analysis of current social trends indicates the possibility of using AI in resolving disputes in court in order to achieve two tasks: 1) streamlining

[3] URL: http://www.deepknowledgeventures.com (accessed September 10, 2022)

[4] Litova E. Sberbank preferred artificial intelligence to Basel recommendations. RBC. 2017, October 24. URL: https://www.rbc.ru/finances/24/10/2017/59ede6029a7947 2245493e73 (accessed September 11, 2021); Mikhailova A. Automation in the company: why and who benefits from it. URL: https://pravo.ru/story/206264/?desc_search = (accessed November 2, 2022); Soldatskikh V. Robots will measure meters. Kommersant. 2018, February 9. URL: https://www.kommersant.ru/doc/3542484 (accessed September 11, 2021)

[5] Dulov V. Complex Processing of Ballots – sleight of hand, and no fraud!? URL: https://rugrad.eu/communication/blogs/VadimKosuhin/cohiba-sleight-of-hand-and-no-cheating / (accessed September 12, 2022)

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the judicial process; 2) establishing the truth in the case. Accordingly, speaking about the use of AI in justice, two areas of its application should be distinguished: 1) office work and general issues of the judicial process; 2) assessment of evidence and establishment of legally significant circumstances in a particular case.

1) The use of individual elements of AI, storage of case materials in a judicial cloud will make them remotely accessible to disputing parties and courts of all instances, the possibility of losing electronic case materials will be excluded, technical errors of personnel will be excluded [13].

2) Speaking about the use of AI to assess evidence and establish legally significant circumstances, for example, in a labor dispute, it is necessary, first of all, to determine the subject of proof in specific categories of cases, as well as the possibility of automatically obtaining information from official databases by the hardware and software complex of the court data related to the subject of the dispute (personnel, accounting, tax, pension, etc.) It is obvious that existing technologies make it possible to develop algorithms for automatically obtaining the necessary and sufficient data related to the subject of proof in the vast majority of disputes on the recovery of wages. At the same time, it will be more difficult to do this in disputes about reinstatement, contesting a disciplinary sanction, etc.

Legal communities have had different views on the acceptability of AI in litigation. So, with a predominantly scientific approach to the problem, the legal community allows such a development of events[6].

In a professional judicial environment, the introduction of AI, which resolves a dispute instead of a person, is generally officially (despite the fact that V.A. Laptev, P.M. Morhat and S.Yu. Chucha cited in this article are professional judges) is categorically not welcomed. This was emphasized by the Chairman of the Council of Judges of the Russian Federation V.V. Momotov, speaking on February 26, 2020 at the conference "Prospects for the use of artificial intelligence in the judicial system of the Russian Federation" in Qatar[7].

The fears of professionals are understandable, although far from being indisputable. The analysis of large amounts of data will formalize many, if not all, evaluation categories within the framework of a case and make the mechanism of justice more predictable.

The fate of AI in justice largely depends on the attitude of “consumers of services” towards it - the disputing parties and their representatives[8], moreover, the majority of specialists, according to surveys, are ready to entrust even the development of their careers to AI. Considering that the legal corporation is already suffering significant losses, unable to compete with machine systems in a number of areas of legal activity[9], supporting the introduction of AI elements into justice is in itself similar to self-sacrifice.

On December 3, 2018, the European Commission for the Efficiency of Justice of the Council of Europe, under No. CEPEJ(2018)14, adopted the European Ethical Charter on the Application of Artificial Intelligence in Judicial Systems[10], which enshrines five principles:

1) the principle of respect for fundamental human rights, designed to ensure the development

[6] Laptev V.A. Artificial intelligence in court: how it will work. URL: https://pravo.ru/opinion/232129/ (accessed October 2, 2022); Shanghai University of Politics and Law, China. URL: https://msal.ru/news/kruglyy-stol-po-yurisprudentsii-v-shankhayskom-politiko-uridicheskomuniversitete (accessed September 21, 2022)

[7] Momotov V.V. Prospects for the use of artificial intelligence in the judicial system of the Russian Federation. Site of the Council of Judges of the Russian Federation. – URL: http://www.ssrf.ru/news/lienta-novostiei/36912 (accessed November 2, 2021)

[8] 82% of people believe robots can support their career better than humans. URL: https://www.oracle.com/human-capital-management/ai-at-work/ (accessed March 13, 2022)

[9] Bozhko M. Sberbank will transfer the work of three thousand employees to robot lawyers. URL: https://www.rbc.ru/rbcfreenews/5877b2979a79478752358fb9 (accessed December 15, 2022); Volin A. I, Gref. How Sberbank introduces robots, fires employees and closes. Versiya. March 9, 2020. URL: https://version.ru/kak-sberbank-vnedryaet-robotov-uvolnyaet-sotrudnikov-i-zakryvaet-ofisy (accessed March 13, 2022)

[10] URL: https://rm.coe.int/ru-ethical-charter-en-version-17-12-2018-mdl-06092019-2-/16809860 f4 (accessed March 12, 2022)

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and implementation of AI-based tools and services that are consistent with fundamental rights (such as the right to adversarial litigation, the right to a fair trial);

2) the principle of non-discrimination, designed in a certain way (real) to prevent the development or intensification of any discrimination against individuals or groups of individuals;

3) the principle of quality and security, designed to process judicial data by certified sources and intangible data (officially functioning databases of regulations, court decisions, etc.), using models developed on an interdisciplinary basis (with the involvement of lawyers and technical specialists), in a safe technological environment (excluding malicious interference in the operation of the software and hardware complex);

4) the principle of transparency, impartiality and reliability, designed to make data processing methods accessible and understandable (use only technologies, methods and algorithms accessible to human understanding), to allow an external audit;

5) the principle of user control, designed to avoid a prescriptive approach and allow the user to act as an informed person responsible for his choice (a binding decision on a case is made not by a software and hardware complex, but by a person - a judge, a party can directly contact a person, bypassing a computer dispute and appeal the decision).

Thus, the developers of the Charter do not trust strong AI to make a decision on a dispute with a complete substitution of a human judge, but at the same time they allow weak AI to take part in the judicial process, in fact, as an assistant human judge.

4. Conclusion

The lack of technological and legal-psychological capabilities to create a strong AI does not impede the movement of law enforcement in general and justice in particular, in two directions:

1) solving problems related to the approximation of specialized AI systems in legal proceedings to human capabilities and their integration to enhance intelligence[11];

2) the creation of artificial intelligence, which is the integration of already created AI elements into a single system capable of participating in justice, but not possessing the properties of a strong AI, free will and not acquiring legal personality.

At the same time, the introduction of AI elements in law enforcement in general and justice in particular should comply with the principles enshrined in the European Ethical Charter on the use of artificial intelligence in judicial systems, the provisions of which should be used after being revised in accordance with the national legal tradition.

[11] Engelbart D.C. Augmenting Human Intellect: A Conceptual Framework, Summary Report AFOSR-3233. Stanford Research Institute, Menlo Park, CA, 1962. URL: https://web.archive.org/web/20051124115145/http://www.bootstrap.org/augdocs/friedewald030402/augmentinghumanintellect/ahi62index.html (accessed March 10, 2022)

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