# Legal system transformation in the digital age: problem statement

Transformación del sistema legal en la era digital: planteamiento del problema

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# **ABSTRACT**

This paper discusses the prospects for the development of the legal system, the system of legislation and the judicial system of the Russian Federation in the context of the fourth industrial revolution associated primarily with the digitalization of all spheres of social life, all social institutions, including the law, of course. There is a range of problematic issues that will require their resolution in the near future. It is suggested that the process which can be described as "technologization of law" is inevitable. The possibility of revising the key institutions of law and actually forming new terminology is not ruled out.

Keywords: law, legal system, system of legislation, system of law, digital technologies.

# **RESUMEN**

Este documento analiza las perspectivas para el desarrollo del sistema legal, el sistema legislativo y el sistema judicial de la Federación de Rusia en el contexto de la cuarta revolución industrial asociada principalmente con la digitalización de todas las esferas de la vida social, todas las instituciones sociales, incluidas la ley, por supuesto. Hay una variedad de problemas problemáticos que requerirán su resolución en un futuro cercano. Se sugiere que el proceso que puede describirse como "tecnologización de la ley" es inevitable. No se descarta la posibilidad de revisar las instituciones jurídicas clave y, de hecho, formar una nueva terminología.

Palabras clave: derecho, sistema legal, sistema de legislación, sistema de derecho, tecnologías digitales.

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#### Introduction

We are far from thinking that within the framework of a single paper we can throw light on all the processes that occur in modern society in connection with the transition to the VI technological mode or the fourth technological revolution, and, accordingly, how they affect the legal sphere. Paying tribute to a legal form, we do not forget that the law as a universal regulator of social relations has always followed the economy. This is eloquently evidenced by scientific research. Being at the present level of their development, archaeology, anthropology and other branches of scientific knowledge provide us with convincing evidence of the developed legal everyday life of the first civilizations: firstly, the river-borne ones (Egypt, China), and then the Mediterranean civilizations (Greece, Rome). In this regard, one cannot but agree with Jean-Louis Bergel that: "The legal organization of human life exists from the very moment when a human society appeared on earth since there can be no societies without a legal system. Even primitive forms of joint life of people suggest the existence of an institution for affirming the identity of each member of the community and recognizing it by others, that is, having a "trans-subject" connection, the development of which leads to the emergence of institutions that apply to a large number of individuals and new forms of activity "[2, p.273].

A generally accepted approach with respect to the legal system in legal science has not yet been developed; the generally accepted definition has not been formulated, and that will be the subject of this study.

#### Methods

The methodological foundations of the study should include a system-holistic approach to legal phenomena, allowing them to be treated as systems that have not only internal but also external relations; sociological approach to the law, its study in action, evolution (functioning); comparative legal approach involving the exchange of information at the level of world legal science and the search for new parameters comparing the legal reality phenomena of different countries.

# Discussion and results

The central subject (element) of a legal system is still a subject of law. The legal concept of this category was formed gradually, as the relations of production and exchange of goods became more complex. The right as the most effective regulator of social relations arises with the institution of property. Barter relations which formed the basis of economic life in antiquity began to gradually recede into the background after the Sumerians invented money - this universal index of the value of a commodity. The human who has created a product had transferred to it the property of use value and at the same time had turned in to an owner, and, therefore, the carrier of certain rights and obligations. Speaking in modern language, he became a subject of law.

To some extent, one can dispute with Bergel and his claim that the personification of an individual is allegedly taking place in the conditions of a primitive society. One can agree that individual claims to something served as an initial psychological impetus to that an individual began to separate himself from others, and, strictly speaking, the law began to form from this point. However, there are serious doubts that this happened already at the stage of primitive society. Moreover, even in the ancient world, a man did not separate himself from others and did not know about freedom in its individualistic interpretation. This was convincingly written by B. Konstant, who investigated the problem of freedom among ancient and new peoples. He notes that only the ancient Germans introduced into the understanding of freedom an individualistic aspect, while it was not present among the Greeks and Romans.

This circumstance fits into the logic of the historical development of ancient civilizations. The law was part of religion among such people as the Hindus, Greeks and Romans. The ancient people's faith was that they received their laws from their gods. For them, the laws were not a creation of the human mind, they were of divine origin. As Plato liked to repeat, "To obey the laws is to obey the gods." Under the conditions of this historical social reality, there could be no talk of any personal principle.

According to Fustel de Coulanges, "law did not come from the idea of justice, but from religion and did not go beyond it. In order for a legal relationship to be established between any two people, religious relations should already exist between them, so that they would have the cult of the same hearth and the same sacrifices. If there was no religious connection between them, then, apparently, there could be no legal relations" [6, p.194].

Religious origin of the ancient law explains one of its main features. Religion was purely civil, that is, special for each city, and therefore the law could only be civil. It is important to understand the meaning that the ancients put into this word. Speaking about civil law, they simply meant that each city had its own code, as in our days every state has. In addition, they believed that the laws of each city are valid and are valid only between citizens of a particular city [6, p.193].

The political ideal of antiquity (for example, Greece) was autarky: a closed, self-sufficient city-state (polis). Ancient Greece and Rome are the basis of modern European civilization, the distinctive features of which, according to Arnold Toynbee, is the synthesis of "technology and nationalism." In this case, nationalism has found its expression in a more presentable design: Eurocentrism. According to the Eurocentrism ideology, the whole history of mankind, in fact, boils down to the birth and development of European civilization which not only influenced many other cultures but was, in fact, their foundation.

For the sake of justice, it is worth agreeing with that. Again, if we consider the history of mankind from its technical, and in the context of the title of the paper, technological aspect, then anyone will hardly take to challenge the technological primacy of the West for many centuries of history for the simple reason that there is no convincing argument in the stock of evidence.

The first cardinal shift in the human lifestyle, the transition from gathering to farming, occurred 10 thousand years ago thanks to the domestication of animals. The agrarian revolution was built on combining the power of animals and people in order to ensure production, transportation and communication. Gradually, the efficiency of food production increased, stimulating population growth and ensuring the viability of large settlements. This eventually led to urbanization and the flourishing of cities.

The agrarian revolution followed by a series of industrial revolutions which began in the second half of the XVIII century. They became milestones on the path from the use of muscle power to mechanical energy and, ultimately, led to that in the process of the fourth industrial revolution, production develops through human cognitive activity.

The first industrial revolution lasted from the 1760s to the 1840s. Its trigger was the construction of railways and the invention of a steam engine, which contributed to the development of mechanical production. The second industrial revolution which began at the end of the 19th century and lasted until the beginning of the 20th century led to the emergence of mass production due to the spread of electricity and the introduction of a conveyor. The third industrial revolution began in the 1960s. It is usually called a computer or digital revolution since its accelerator was the development of semiconductors, the use of large computers in the sixties of the last century and personal computers and the Internet in the nineties in the seventies and eighties.

According to Klaus Schwab, the founder and President of the World Economic Forum in Geneva (Switzerland), we are today at the origin of the fourth industrial revolution. It began at the turn of the millennium and relies upon the digital revolution. Its main features are the "ubiquitous" and mobile Internet, miniature production devices (which are constantly becoming cheaper), artificial intelligence, and learning machines.

The lesson of the first industrial revolution is still relevant today: the main indicator of progress is still the measure of the adoption of technological innovations by society [14, p. 15-17].

Industrial revolutions caused changes in the legal system of society. Turning to the first industrial revolution, it is impossible not to mention the French Civil Code of 1804, named as Napoleon's code, and its influence on the development of civil legislation in a number of European states. Its development and adoption can be qualified as a kind of legal consolidation of the transition from feudalism to capitalism, a more progressive stage of social development. As Napoleon Bonaparte himself said, "my true glory is not in the forty battles I have won; Waterloo crossed them all out. But the Civil Code will not and cannot be forgotten." [10, p.429]

Structurally, it was divided into three parts: persons, things, obligations. From this, it follows that the central element of the legal system was recognized as subjects of law. With the adoption of the Code, the process of the bourgeois civil law formation was basically completed [9, p.184].

In the "homeland" of capitalism, England, significant changes occurred in the legal system under the influence of the first industrial revolution. The archaic of the legal norms of the feudal period reached back. A number of legislative acts aimed at regulating economic relations appeared: the Parliamentary Act "On Companies" (1856), the parliamentary act "On the Rules for Concluding Deals on Real Estate" (1875), the Act "On Entrepreneurs and Workers" (1875), the Act "On the sale of goods "(1893).

The second industrial revolution is connected with mass production through the use of electricity and conveyor. Mass production means a truly gigantic increase in the number of wage workers. The legal protection of workers has appeared as one of the main social and legal problems. Labor legislation and the right to social security are painfully but, nevertheless, being developed. For example, in England, the system of collective agreements on working conditions began to take shape as early as the 60s of the nineteenth century. They were a kind of "gentleman's" agreements and did not have a strict legal force. The hiring of labour was governed by civil law rules

for a long time. In Germany, the social protection and position of the workers were significantly better than in England; that was associated with the social policy that Otto von Bismarck began.

The third industrial revolution can be characterized by a fairly stable legal system. In all industrialized states, the system of law, like the system of legislation, were rather clearly structured on the basis of the subject and method of legal regulation as the largest blocks of the legal system. However, branches of legislation, are increasingly becoming complex. Interest in intellectual property rights has been revived.

The fourth industrial revolution which began in the 2000s led to the emergence of new branches of law and legislation. Up to the moment, we cannot say exactly what trends will prevail in the development of the legal system. This revolution is at the very beginning. Its difference from previous revolutions is that the nature of the changes taking place is so fundamental that world history has not yet known a similar era which is a time of both great opportunities and potential dangers. The independence of the fourth industrial revolution can be justified by three factors.

The pace of development. Unlike previous ones, this industrial revolution is developing at a non-linear, but rather exponential pace.

Latitude and depth. It is based on the digital revolution and combines a variety of technologies, causing the emergence of unprecedented paradigm changes in the economy, business, society, in each individual life. It changes not only the "what" and "how" we do but also the "who" we are.

Systemic exposure. It provides for a holistic external and internal transformation of all systems, across all countries, companies, industries and society as a whole [14, p.10-11].

The digital revolution will affect all elements of the legal system to one degree or another. As it was already mentioned above, in legal science there is no unity of approaches to the legal system. There is no consensus on which elements of legal reality can be included in the legal system. And the most important thing is that in the legal literature there are proposals to abandon the category of "system" in relation to such structures as a legal system, a system of law, a system of legislation. Often there are voices that the systematic approach is outdated, we need to give it up, or retaining it, move on.

System (from Greek word "systema" - composed of parts, connected) is a set of elements that are in relationships, connections and links among themselves and form certain integrity or unity. A system is characterized not only by the availability of connections and relations between its constituent elements (a certain organization) but also by an inseparable unity with the environment, in relations with which the system manifests its integrity [4, p.329].

From our point of view, there are no methodological, theoretical and practical grounds for abandoning the system, systematicity, and systematic approach in the study of legal phenomena. Moreover, it is the systemic nature that gives institutional properties to the law as is an integral institution which is relatively separate from the social environment. A society in which law is intended to establish strong social discipline is also a system.

The concept of "society" is used to describe structured social relations and institutions in a large community of people, which cannot be reduced to a simple set or aggregation of individuals. A society is considered as a coherent whole [7, p.28, 32].

The idea of society has never been universal. Nevertheless, various interpretations of society were based on the foundation of a national state, and this means that the emphasis was placed on the fact that it, i.e., society, is an integral systemic entity. Now, in connection with globalization, the perception of society formed on the basis of a nation state is changing. The statement that "…Legal science by its very nature is transnational" is obvious [3, p.11]. Globalization also affects law, but it does not lose its systemic nature.

- S.S. Alekseev considered that the law is a very complex holistic system. From his point of view, the most important common features of law as a systemic phenomenon are:
- the law belongs to a special class of system objects combining the features of inorganic and organic systems, and depending on the development of the law of a given state, such its features as a structural commonality caused, in particular, by the codification of legislation, the level of organicness of law increases; in this aspect, some features of the logical system are also inherent to the law;
- law is a functional social system: its origin, existence and development is subordinated to class-specific goals, and in accordance with this, a number of specific functions are characteristic of it and its divisions (branches);

- law is a formalized system: a legal substance is objectified in legal acts, giving the law a distinct institutional character;
- differing by its stability, law time has the features of a dynamic system at the same and even some mechanisms for a kind of its self-regulation;
- law is a social system, the existence and functioning of which is associated with the individual legal activity of the competent authorities (justice);
- and, finally, the law is characterized by a complex and multi-level structure [1, p. 278].

Recognizing the systemic nature of law, it is logical to go to the concept of the legal system.

According to professor V.K. Babaev, the legal system is "a set of interrelated, coordinated and interacting legal means governing public relations, as well as elements characterizing the level of legal development of a country" [11, p. 85].

Professor V.D. Perevalov considers that it possible to define a legal system "... as an integral complex of legal phenomena conditioned by objective laws of the development of society, which is recognized and constantly reproduced by people and their organizations (a state) and used by them to achieve their goals" [12, p. 463].

Professor N.I. Matuzov understood the legal system as "...a set of internally consistent, interconnected, socially homogeneous legal means (phenomena) with the help of which public authority has a regulatory, organizing and stabilizing effect on public relations, behavior of people and their associations (consolidation, regulation, authorization, prohibition, persuasion and coercion, stimulation and restriction, prevention, sanctions, responsibility, etc.") [13, p. 178].

The definitions of the legal system are not very different from each other. It seems to us that the definition is clearly not suitable for the objectification of the legal system since it claims to be extremely accurate. Therefore, the definitions are applicable in the legal sphere more to the legislation than to such a broad category which is the legal system, since it is a "container, a centre of various legal phenomena" [8, p.276].

The category "legal system" began to be applied in Russian legal science in the 80s of the twentieth century. Prior to this, a more familiar construction was used: a legal superstructure. It is reasonably considered that the legal system is much broader in its content and includes a legal superstructure.

The structural construction of the legal system is of the greatest scientific and practical interest. Lawrence Friedman rightly believes that "it is the structure of the legal system, its skeleton or framework and its long-existing part; it gives shape and certainty to the whole" [5, p. 10].

The legal system structure is seen in different ways. The elements of the legal system include phenomena of a spiritual or ideological nature (legal science, legal concepts, legal principles, legal culture, legal policy); the law and the law expressing it; legal relations; legal practice; and legal technology (V.K. Babayev).

In addition to law, the legal system also includes law-making, justice, legal practice, normative, law-enforcement and right-interpretive acts, legal relations, subjective rights and duties, legal institutions (courts, prosecutor's office, legal profession), legality, responsibility, mechanisms of legal regulation, and also legal conscience. In addition, there are several blocks in the legal system: the normative, the legal, the doctrinal (scientific), the statistical, and the dynamic block, and the block of rights and obligations (N.I. Matuzov).

### Conclusions

Comparative analysis shows that the structural description of the legal system using different categories, such as an element, unit, level, does not indicate fundamental differences between the positions of various authors. Roughly, they say about the same elements of the legal system. It is another matter that some authors consider the law itself to be the main element of the legal system, and to some extent fall into eclecticism, while others consider as such the subjects of law, and, above all, human, a personality. The second point of view seems preferable.

Obviously, not all structural elements will be altered to the same extent. For example, legal culture and legal consciousness are conservative enough to react so quickly to the processes which occur in the modern digital era.

Legal science responds faster to the calls of the times. Recently, a lot of work has appeared on the digitalization of law. Information law has long been a part of the nomenclature of scientific specialities. At the University named

after O.E. Kutafin (MSLA), a master's program "Master in IT-technology" is implementing.

Information and communication technologies are actively being introduced into the activities of legal institutions: prosecutors, courts, and legal professions. It is impossible to imagine any kind of legal activity without the use of reference information systems.

Of course, it is possible to predict serious changes in such branches of law as banking, tax, financial, civil, labour with the introduction of Internet technologies, robots, electronic commerce, artificial intelligence, distributed databases, genetic engineering, the Internet of things, electronic currency. Already today, the so-called joint economy is being formed, which will make serious adjustments to civil law and related branches of law. Many companies will not be rigidly "tied" to certain jurisdiction. In short, the system of law and the system of legislation are to be gradually modernized. The speed of these changes will depend on the speed of changes that occur in modern, globalizing society.

# **BIBLIOGRAPHIC REFERENCES**

- 1. Alekseev S.S. General theory of law: a textbook. M.: Prospekt, 2009. 576 p. (In Russian)
- 2. Bergel J.-L. General Theory of Law / Translated from French under the general editorship by V.I. Danilenko. M.: Publishing House. NOTA BENE, 2000. 576 p. (In Russian)
- 3. David R., Joffre-Spinosi K. Major Legal Systems of the Present / Translated from French by V. A. Tumanov. Moscow: International Relations, 1999. 400 p.(In Russian)
- 4. Philosophical Dictionary / Edited by I.T. Frolov. M.: Politizdat, 1981. 444 p. (In Russian)
- 5. Friedman L. Introduction to American law / Translated from English under the general editorship of M. Kalantarova. M.: Progress, 1992. 286 p.(In Russian)
- 6. Fustel de Coulange. Ancient city. Religion, laws, institutions of Greece and Rome. M.: CJSC Publisher Tsentrpoligraf, 2010. 414 p.(In Russian)
- 7. Giddens E., Sutton F. Basic concepts in sociology / translated from English by E. Rozhdestvenskaya, S. Gavrilenko; under the scientific editorship of S. Gavrilenko. M.: Publishing House Higher School of Economics, 2018. 336 p.(In Russian)
- 8. Carbonnier J. Legal sociology / translated from French, and introductory article by V.A. Tumanov. M.: Progress, 1980. 352 p. (In Russian)
- 9. Livantsev K.E. History of the bourgeois state and law: study guide. Leningrad: Publishing House of the Leningrad University, 1986. 288 p.(In Russian)
- 10. Manfred A.S. Napoleon Bonaparte. M.: Mysl, 1972. 724 p.(In Russian)
- 11. Obshchaya teoriya prava: kurs lektsii/pod obshch. red.VK Babaeva. Nizhnii Novgorod: Izd- vo Nizhegor. VSh MVD RF, 1993. 544 p.(In Russian)
- 12. Teoriya gosudarstva i prava: uchebnik/pod red.VM Korel'skogo, VD Perevalova. M.: Infra-M, 1997. 570 p. (In Russian)
- 13. Teoriya gosudarstva i prava: kurs lektsii/pod red.NI Matuzova, AV Mal'ko. M.: Yurist ", 2000. 776 p. (In Russian)
- 14. Shvab K. Chetvertaya promyshlennaya revolyutsiya. M.: Eksmo, 2016. 138 p. (In Russian)