

BOOK REVIEW

TECHNOLOGICAL ORDERS AND LEGAL THOUGHT: A DUALISTIC PARADIGM OF DEVELOPMENT

Vladimir S. Osipov^{1*}, Aleksey V. Minbaleev²

¹Moscow State Institute of International Relations (MGIMO-University)
76, ave. Vernadsky, Moscow, Russia, 119454

²Kutafin Moscow State Law University (MSAL)
9, Sadovaya-Kudrinskaya St., Moscow, Russia, 123001

Review of a book

Pashentsev, D. A., Zaloilo, M. V., & Dorskaya, A. A. (2021). Changing of Technological Orders and Legal Development of Russia. Norma: INFRA-M.

Keywords

technological orders, fundamentals of digitalization, jurisprudence, theory of law, philosophy of law

For citation

Osipov, V. S., & Minbaleev, A. V. (2021). Technological orders and legal thought: A dualistic paradigm of development. *Digital Law Journal*, 2(3), 71-77. <https://doi.org/10.38044/2686-9136-2021-2-3-71-77>

* Corresponding author

ТЕХНОЛОГИЧЕСКИЕ УКЛАДЫ И ПРАВОВАЯ МЫСЛЬ: ДУАЛИСТИЧЕСКАЯ ПАРАДИГМА РАЗВИТИЯ

В.С. Осипов^{1*}, А.В. Минбалеев²

¹Московский государственный институт международных отношений (МГИМО-Университет) МИД России
119454, Россия, Москва, просп. Вернадского, 76

²Московский государственный юридический университет им. О. Е. Кутафина (МГЮА)
123001, Россия, Москва, ул. Садовая-Кудринская, 9

Рецензия на книгу

Пашенцев, Д. А., Залойло, М. В., Дорская, А. А. (2021). Смена технологических укладов и правовое развитие России. Норма: ИНФРА-М.

Ключевые слова

технологический уклад, основы цифровизации, теория права, философия права

Для цитирования

Осипов, В. С., Минбалеев, А. В. (2021). Технологические уклады и правовая мысль: дуалистическая парадигма развития. *Цифровое право*, 2(3), 71–77. <https://doi.org/10.38044/2686-9136-2021-2-3-71-77>

* Автор, ответственный за переписку

This is not the first time that scientists from the Institute of Legislation and Comparative Law under the Government of the Russian Federation have demonstrated to the scientific community the true results of interdisciplinary research; there is a gap in domestic legal science regarding solving modern scientific problems by integrating and generating knowledge and methods from various scientific fields, which these scientists fill. This is especially important in conditions when interdisciplinary research is not popular enough in domestic science; thus the results obtained usually take a long time to be evaluated and slowly gain recognition. One such study is the monograph “Changing of Technological Orders and Legal Development”, which follows the direction of post-nonclassical legal science based on interdisciplinarity as one of the fundamental principles of cognition.

The author’s team consists of well-known scientists — specialists in jurisprudence, in whose works the urgent problems of the development of the legal sphere in the context of digitalization and the widespread development of modern technologies have been repeatedly raised. The existing groundwork in the study of various issues of the mutual influence of law and technology allowed the authors to move on to the study of fundamental problems of historical and legal development through the synthesis of the achievements of legal and economic theories.

Academician T. Y. Khabrieva (2010) notes that “economic theory and jurisprudence as social sciences are linked by the unity of their universal and general scientific methods”. This position opens up wide opportunities for Russian researchers to discuss the mutual influence of economic and legal science for the benefit of solving the problems of state and social development.

Research by D. A. Pashentsev, M. V. Zaloilo, and A. A. Dorskaya focuses on the trend of the development of international social science. It explores relationships, mutual influence, and conceptual-categorical interchange, defining new areas and directions of the search and generation of knowledge, which can be observed by taking the example of a relatively new and widespread scientific trend — the economic analysis of law, aimed at considering legal institutions from the standpoint of economic conditionality, critically rethinking traditional legal research methodology.

However, the authors are not inclined to exclusively follow the mainstream of economic science, which is typical for some researchers (R. A. Posner, R. C. Ellikson, N. Mercuro, S. G. Medema, D. D. Friedman, H. Winter, J. Leitzel, or M. I. Odintsova), but rather continue to adhere to a balanced approach, reflected in the works of other researchers (D. C. North, G. Calabresi, A. G. Karapetov, S. V. Korolev, or I. L. Chestnov).

In this regard, the approach of the monograph’s authors is expressed by taking into account the evolutionary-institutional direction of economic science and irrational motives of the behavior of economic actors in accordance with the latest trends in the development of behavioral theory (R. Thaler, D. Kahneman, A. Tversky, R. J. Shiller, G. A. Akerlof, etc.).

The problem of legal support for the change of technological orders, the transition to a new way in modern conditions of digitalization of the economy, and the robotization of production, along with a reduction in the use of living labor in the reproduction process, requires appropriate legal support, since the collision of interests of labor and capital against the background of a “legal vacuum” is fraught with social upheavals, the experience and disastrous consequences of which are well known not only to Russia.

Thus, the definition of the legal content and legal regulation of technological structures in their historical and evolutionary dynamics seems to be an urgent research task in the development of fundamental science.

The successful combination and application of historical, comparative legal, and formal legal methods not only set a wide context for the study of the development of law in the light of changing technological structures (from the first to the modern sixth), but also ensured the novelty of the results obtained in the form of an increase in scientific knowledge and the identification of true economic and technological prerequisites for legal reforms of the past and present.

Despite the fact that the theory of technological structures is considered the direction of economic research (N. D. Kondratiev, J. A. Schumpeter, D. S. Lvov, S. Y. Glaziev, C. Perez, Y. V. Yakovetz, etc.), the authors thoroughly and reasonably explain the institutional and legal point of the processes of changing technological structures in relation to each order, which should be discussed in more detail.

The first technological order approximately refers to the period of the beginning of the development of technologies, which gave impetus to the development of capitalist relations. This conventionally begins from the second third of the 18th century and lasts for about a century.

During this time, outstanding works were created in the fields of politics, jurisprudence, and economics.

Accordingly, in his works Henry St. John Bolingbroke tried to prove that the conflict between the right of popular sovereignty and the divine right of the king had been exhausted, a period of struggle

for power had begun, and the time had come when the morality of those in power is directly dependent on responsibility.

David Hume (1998) made a significant contribution to the development of the doctrine of state and law, arguing that the state is created by usurpation or violent conquest without the consent or voluntary subordination of the people. The state, according to Hume, is a collection of rulers and subjects, which ensures the realization of a common interest. Adam Smith (1998) defended the idea that human actions are guided by moral ideas, but in the *Wealth of Nations* advocated a minimal role for the state and greater freedom of private entrepreneurial initiative. During the same period, other outstanding works were created: Emer de Vattel, William Blackstone, Jeremy Bentham, Edmund Burke, William Godwin, François Marie Arouet Voltaire, Jean-Jacques Rousseau, Charles Louis Montesquieu, and many others.

The second technological mode took place in approximately the last two thirds of the 19th century, when steam engines, steam navigation, industrial coal mining, and the development of railways found widespread use. In the social sciences and jurisprudence in particular, this period is characterized by the active development of the historical school (I. Koenig, F. Savigny, G. von Hugo, G.-F. Puchta, S. Muromtsev, P. Novgorodtsev, etc.), which promoted the idea gradual evolutionary reform of legislation and law, taking into account the historical experience of peoples, their customs, and their moral and ethical ideas. The first attempt was made to resist the statist approach to law.

In the same period, R. Pound's iconic work "Mechanical Jurisprudence" (1908) was published, which assesses the role of logic in the methodology of legal science. It is important to mention here that the so-called pragmatism begins to dominate in philosophy (C. S. Peirce, W. James, J. Dewey), which could not but affect research in the field of legal science and social sciences in general. Pound's criticism of the rational approach in jurisprudence results in his refusal to recognize science itself as "mechanical" and scientific jurisprudence. The productive development of law, according to Pound, should be based on the philosophy of pragmatism: that is, in practice as a criterion of truth, on meaning, not form, on applied significance, and on the practical implementation of the rule of law.

The French school of legal institutionalism, represented by M. Hauriou, harshly criticized the position of adherents of the regulation of law and its identification with the law. Thus L. Duguit, F. Moreau, F. Gény, and others unambiguously pointed out that "... there is only one type of law, since there is one type of norm — the law ... and as for the usual norms, it is hardly worth qualifying them, since in fact they no longer exist" (Duguit, 1907; Moreau, 1902; Geny, 1919). Hauriou, however, calls this position fruitless and contrary to "the given history and the facts of modern life" (Hauriou, 1910). In this regard, we state the convergence of the positions of R. Pound and the French institutionalist M. Hauriou. The latter noted that "the invention of the law did not destroy either regulation or custom; the law simply established its supremacy over them" (Hauriou, 1910). The recognition of the rule of law, however, did not abolish the roles of custom or the historical order, which is important precisely for the practice of implementing norms.

In this regard, Pound noted that the excessive scientific nature of law is harmful in the impact of the law on society (which surely can be regarded as the embeddedness of legal nihilism). Avoiding mechanisms, petty regulation, or raising the letter above the spirit can significantly alienate society from law due to the complexity of the texts and their weak realizability in practice in the regulation of social relations. Ford's conveyor system suffered from the same problem: production operations were subject to petty regulation, whilst the monotony of work operations led to workers' rapid fatigue and a sharp decrease in labor productivity. This disadvantage was subsequently eliminated

through the widespread use of automated and robotic production lines — that is, by minimizing the use of living labor in the production process.

The third technological order is characterized by discoveries in the field of inorganic chemistry, the development of ferrous metallurgy, shipbuilding and wider railway construction, and a significant increase in the number of patents for inventions. This period roughly coincided with the end of World War II.

There was a tendency in jurisprudence to condemn totalitarianism (G. Radbruch), with the revival of natural law (J. Messner, A. Auer, E. Wolf, F. Horst, H. Rommen, etc.). In many ways, the appeal to natural law ideas was the result of the condemnation of Nazi, fascist ideas about law and the state (G. Gentile, U. Spirito, W. Frick, A. Rosenberg, J. Binder, etc.).

The development of natural-legal ideas in jurisprudence was also facilitated by the famous work of H. Kelsen “The Pure Theory of Law”. It should be noted that Kelsen clearly understood the difference between what is and what should be: “The identification of the form of the state with the constitution exactly corresponds to the prejudice, according to which all right is contained in the law” (Kelsen, 1960). Despite Kelsen’s clearly positivist views, his idea of differences in the formulation of the rule of law and its implementation deserves every support.

It is important to note that the classical theory of law has finally taken shape and coincided in time with the implementation of the fourth technological order. This is characterized by the creation and active use of internal combustion engines, computers, conveyor production, etc. The sectors of the automotive industry, electronics, astronautics, and nuclear energy are rightly considered to be the core of the fourth technological order. The conveyor type of production is characterized by the monotony and repeatability of operations, their precise regulation, their automation, and control of execution; thus, attention is paid to the structure of the rule of law, as well as the identification of the right and the rule of law. The technocratic approach to law resulted, among other things, in the inertness of the rules of law, their some detachment from the practice of implementation. The conveyor system of H. Ford was built in such a way that all stages of the production process were divided into basic operations that could be quickly trained to an employee and which could be quickly carried out in the production process. Regulation, relative simplicity, and the monotony and repeatability of operations dramatically increased labor productivity in the framework of conveyor production. This idea has been borrowed from so many activities, such as in the field of fast food. It was widely implemented in the most unexpected places: for example, it gave impetus to the development of ergonomics for the purposes of labor productivity.

This was reflected in the development of law. The accuracy of the wording, the severity of the consistency, the structuredness and form of the rule of law, and the form in the broadest philosophical understanding turned out to be, to some extent, more important than the content. For example, H. L. A. Hart (1961), who described law as coercive orders, explores the problems of formalism in law. The prevalence of form over content is a consequence of the transformations of the times of the fourth technological order and, at the same time, a “wicked problem” of modernity. Achievements in the field of cybernetics, statistical science, and mathematics had a significant impact on the law. Scientists proposed making more active use of these achievements, especially in criminal law and forensic science.

The fifth technological order, in a sense, continues the achievements of the previous order and is characterized by the rapid development of microelectronics, biotechnology, new types of communication (Internet, fiber-optic technology, cellular communication), and information technologies. Its difference from the fourth is reduced to the transition from serial and mass production, according to

the conveyor production model, to mass individualized production, increasing the flexibility of production to take into account the individual needs of the consumer. It became clear that the needs of consumers differ from each other and are not reducible to a “common denominator”. In legal science, this resulted in taking into account the individuality of the behavior of a citizen, including the characteristics or the motives of their behavior and participation in public legal relations. Although the rule of law was still identified with the legislation, practice has already considered the differences in the implementation of the rule of law by different citizens.

The sixth technological order, and behavioral aspects of the activities of individuals and legal entities, made it possible to return to the idea that the rule of law is broader than the legislative norm, since it provides for the actual implementation of the rule in practice.

Naturally, the authors paid great attention to the current sixth technological order with its nanotechnology, digitalization, and the Internet of Things. In our opinion, law as a science has predictive tools, and it would be interesting to know the authors' opinion on the legal basis and consequences of the transition to the upcoming seventh technological order of metacognitive technologies. In addition, we would like to invite the authors to consider the mutual influence of legal and economic sciences along with sociological, political science, and psychological branches of knowledge for a more complete disclosure of the paradigm of technological orders.

These remarks set the trajectory of the further research program in the direction of expanding the boundaries of interdisciplinarity on the basis of a continuously developing theoretical core, the commonality of fundamental ideas, and the principles of understanding past and modern legal events laid down in the monograph. This does not diminish the overall positive work experience.

The monograph makes a significant contribution to the growth of scientific knowledge as an interdisciplinary economic and legal research aimed at the development of fundamental science.

We would like to wish the authors creative inspiration to continue research in a given thematic direction and the subsequent development of the fundamental innovative ideas outlined in the monograph under review.

References

1. Duguit, L. (1907). *Manuel de droit constitutionnel: Théorie générale de l'état-organisation politique*. Albert Fontemoing Editeur.
2. Geny, F. (1919). *Méthode d'interprétation et sources en droit privé positif*. L.G.D.J.
3. Hart, H. L. A. (1961). *The Concept of Law*. Oxford University Press.
4. Hauriou, M. (1910). *Principes de Droit Public*. Recueil Sireu.
5. Hume, D. (1998). *An Enquiry concerning the Principles of Morals* (T. L. Beauchamp, Ed.). Oxford University Press. (Original work published 1751)
6. Kelsen, H. (1960). *Pure Theory of Law*. Berkley.
7. Khabrieva, T. Ya. (2010). Economic and legal analysis: a methodological approach. *Journal of Russian Law*, 12, 5–26.
8. Moreau, F. (1902). *Reglement administratif: Étude théorique et pratique de droit public français*. Albert Fontemoing Editeur.
9. Pound, R. (1908). Mechanical Jurisprudence. *Columbia Law Review*. 8(8), pp. 605–623.
10. Smith, A. (1998). *An inquiry into the nature and causes of the wealth of nations* (K. Sutherland, Ed.). Oxford University Press. (Original work published 1776)

Information about the authors:

Vladimir S. Ossipov* — Dr. Sci. in Economics, Ph.D. in Economics, Associate Professor, Asset Management Department, Moscow State Institute of International Relations (MGIMO-University), Moscow, Russia.

vs.ossipov@inno.mgimo.ru

ORCID 0000-0003-3109-4786

Aleksey V. Minbaleev — Dr. Sc. in Law, Head of the Department of Information Law and Digital Technologies, Kutafin Moscow State Law University (MSAL), Moscow, Russia

Lab.kpit@msal.ru

ORCID 0000-0001-5995-1802

Сведения об авторах:

Осипов В. С.* — доктор экономических наук, Ph.D., доцент, профессор кафедры управления активами Московского государственного института международных отношений (МГИМО-Университет) МИД России, Москва, Россия.

vs.ossipov@inno.mgimo.ru

ORCID 0000-0003-3109-4786

Минбалеев А. В. — доктор юридических наук, заведующий кафедрой информационного права и цифровых технологий Московского государственного юридического университета им. О. Е. Кутафина (МГЮА), Москва, Россия.

Lab.kpit@msal.ru

ORCID 0000-0001-5995-1802