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IN SEARCH OF A NEW METHODOLOGY OF SOCIAL REGULATION AND OF KNOWLEDGE OF LAW: ABOUT CONVERGENT TECHNOLOGIES AND AESTHETICS OF LAW

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Abstract: Modern law falls into an "aesthetic" crisis, which must be considered as an expression of the structural crisis of law at the moment of its transformation from the state of a self-regulating system to a self-developing system. Postmodern law needs new legal patterns, which would allow returning the ease of perception of law and the beauty of the formulation of its prescriptions. In this regard, a revision of the methodology of social regulation and of knowledge of the law is required. The starting point is an appeal to the aesthetics of law. The final result is determined by the technological level.

The objectives of the study are to establish the possibility of expanding the methodology of cognition of law through the methods of aesthetics and convergent (NBICS) technologies, as well as to determine the nature and extent of their influence on the methodology of social regulation.

The introduction of aesthetic methods in the context of the development and implementation of NBICS technologies will allow us to establish the regularities of the genesis of law and the legal order, which will determine the main directions of overcoming the modern structural crisis in law.

Keywords: philosophy of law, aesthetics of law, convergent (NBICS) technologies, legal gnoseology, epistemology of law, methodology of social regulation, legal patterns, crisis of law, form of law, content of law.

Introduction

It seems that the thesis about the structural crisis of law currently does not need special argumentation. The consensus formed in the scientific community in the last century, related to the understanding of the law itself and its importance in social regulation, is gradually disintegrating. Increasingly, the subject of scientific discussion is the questions, the answers to which a few decades ago were considered universally recognized.

The law has gone a long way in its development (archaic, traditional and modern). Currently, it is undergoing a transformation due to the transition from the modern condition to the postmodern one. What the qualitative differences between modern and postmodern law will be, one can only guess. However, it cannot be denied that this transition has already begun. In the field of legal regulation, a lot of contradictions have accumulated, which, using Hegel's conceptual and categorical apparatus, can only be removed; that is, the law must move to a qualitatively new level of its development for this.

An important manifestation of this state of the law is the "aesthetic" crisis, which is expressed not only in the dominance of legal content over form and in the absence of a close connection between the form of law and the philosophy of design thinking. This is undoubtedly the case, but it greatly restricts the scope of legal aesthetics exclusively to the sphere of the form of law and justifies ways to overcome crisis phenomena through the emergence of legal design and service design in law, the improvement of legal technique and legal writing.

At the same time, the current crisis of law is much deeper and has a structural character. Legal thinking and legal ideology have lost their former lightness. The problem lies not in their form but in their content, which for objective reasons, has become unnecessarily complex, and, consequently, has lost the ability to be perceived by people on an intuitive level, which in turn hinders the practical implementation of the law.

The appeal to aesthetics is necessary not only to identify individual symptoms of the crisis condition of law. The formation of a new direction in the philosophy of law – legal aesthetics (aesthetics of law) – will allow us to qualitatively improve the methodology of social regulation and of knowledge of the law, to offer new ways of developing the tools of legal regulation.

Until now, legal aesthetics has been limited to the sphere of the form of law and the admiration for the beauty of legal formulations belonging to ancient Roman lawyers. Indeed, the need to know the law from an aesthetic standpoint existed earlier. At the same time, the real possibility of implementing such an approach has appeared only in our days, when convergent (NBICS) technologies have been developed, their introduction has begun, including in the field of humanitarian discourse.

Traditional jurisprudence was characterized by a very limited methodology, mainly including doctrinal (formal-legal), historical-legal and comparative-legal (comparative) approaches. However, the increasing complexity of social life requires the establishment of the possibility of expanding the methodology of cognition of law through methods peculiar to aesthetics and associated with the use of convergent (NBICS) technologies, determining the nature and degree of their influence on the methodology of social regulation, the prospects of this direction of the general doctrine of law.

This approach will significantly expand the cognitive tools not only of the philosophy of law but also of jurisprudence itself, providing an alternative position for understanding legal phenomena and processes, categories and phenomena, and will also allow the development of the methodology of social regulation by defining new legal patterns that can be used alongside or instead of legal norms.

Results and Discussion

Recent studies have noted that the current state of public relations can be characterized as a socio-economic singularity (from Lat. "singularis" – the only one, special), suggesting (1) the dominance of a certain group of related technologies, (2) a high level of monopolization and (3) increasing social inequality (Khabrieva, 2022). Leading economists and sociologists note that these phenomena have now reached a previously unknown level and continue to intensify (Greenspan, 2015; Piketty, 2015; Rajan, 2011; Stiglitz, 2015, 2016).

It is no coincidence that when describing the socio-economic singularity, the dominance of a certain group of coupled technologies is put in the first place. It is the transition to a new group of such technologies that, as a rule, makes it possible to overcome the condition of public relations under consideration. According to leading scientists of the US National Science Foundation, the current socio-economic singularity can be overcome through the implementation of the so-called NBICS initiative (Roco & Bainbridge, 2003).

NBICS initiative involves the development and implementation of a group of coupled technologies, including (1) nanotechnology, (2) biotechnology and genetic engineering, (3) information and communication technologies, (4) cognitive technologies, including cognitive neurotechnologies, and (5) social technologies. This group began to form in the second half of the twentieth century and, in our time, has reached the stage of its mass introduction.

The implementation of the NBICS initiative as a means of overcoming the current socio-economic singularity serves as a prerequisite for the overall transformation of the entire system of social regulation, primarily ethics and law, the transition of the latter to a new – postmodern – state. A number of tasks of philosophical, legal and methodological levels are associated with the knowledge of the content and prospects of such a transition. Without their solution, specific legal issues related to the rethinking of legal security, protection and regulation of public relations cannot be correctly posed, and, consequently, a model of post-modern law cannot be created, and its role in public life cannot be determined, the legal reality cannot be appropriately presented, the legal existence of the person himself cannot be revealed.

Thus, the modern cognitive process aimed at the formation of a common doctrine of law objectively needs to expand its methodological tools, allowing, if necessary, to include convergent (NBICS) technologies in the mechanism of social regulation. An important direction of such expansion is aesthetics, which has laid down a truly scientific approach to beauty as a reflection of expediency in the mechanism of something. This statement is also true in relation to law, which makes it possible to distinguish legal aesthetics, which is based on the primacy of beauty – the beauty of law as an integral system and the beauty of a separate legal pattern. At the same time, it is the achievements of modern aesthetics that make it possible to solve the cognitive tasks facing jurisprudence through mathematical modelling, the main direction of development of which is convergent technologies.

The implementation of the proposed approach will significantly expand the cognitive tools not only of the philosophy of law but also of jurisprudence itself since an alternative aesthetic position is provided for the awareness of legal phenomena, processes and categories. The assessment of law from the standpoint of its beauty and expediency on the basis of modern mathematics and convergent, in particular, cognitive technologies, seems to be the way that will reveal new patterns of social regulation and prospects for its development.

At first glance, it seems that aesthetics does not and cannot have a direct relationship to the law. However, a number of regularities of social management, the knowledge of which is necessary for the integration of convergent (NBICS) technologies into it (also through law), can be established mainly through the methodology of this particular field of knowledge. Measure and harmony, catharsis and calocagacy, grace and imitation, taste and ideal, that is, almost all aesthetic categories, to one degree or another, can and should be used to characterize law, reveal its essence and cognition of genesis. The authors also share the position of Losev, who emphasized that the subject of aesthetics is an expressive form, no matter what area of reality it belongs to. Absorbing and concentrating the specifics of any socio-historical specifics, any expression of social existence can become a source of aesthetics, a sphere of its refraction (Losev & Shestakov, 1965).

In modern jurisprudence, there is a stable concept of "form of law", which, as a rule, is identified with the concept of "source of law", that is, an external expression of legal norms: laws and other normative legal acts, judicial precedents, legal customs, agreements with normative content, etc. However, the expressive form of law and the expressive form of a legislative act are far from the same thing. In the context of the relationship between the content of law (legislative act) and its form (in the traditional sense of jurisprudence), it should be attributed precisely to the content since it reflects the internal structure of a legal norm (legislative provision), its structure, accessibility to the understanding of legal subjects. There are grounds to talk about the expressive power of law in the case when its norms are easily perceived by people, almost on an intuitive level.

It is interesting here that in the context of the introduction of NBICS technologies, some foreign researchers directly point out that machines, and robots, in a word, artificial intelligence, will take away a person's work in the foreseeable fu-

ture. So, Skinner (2019) cites the results of research by scientists from Oxford University, who conclude that in the next two decades, 47% of jobs in the United States will experience a high risk of replacing an employee with a robot (p. 110). Researchers from Boston and Columbia Universities point out that robots can cause a long-term decline in the share of wages in the income structure of the population, occupying about 40% of jobs in the United States alone in the next fifteen years. Then Skinner (2019) writes that robots apply for five specialities:

> (1) middle managers; (2) retail salesmen; (3) report writers, journalists, authors and presenters; (4) accountants and accounting assistants; (5) doctors. However, he himself is not limited to the listed labour functions and supplements the above list with lawyers, believing that distributed registries and artificial intelligence will lead to the digitalization of the legal sphere, as a result of which the need for professional lawyers will disappear (p. 112).

The fact that the implementation of the NBICS initiative will directly affect the law as a universal social regulator is also indicated by those authors who, not being scientists themselves, seek to convey to the general public their vision of the future of humanity. So, such authors (S. Wallis) emphasized that "given the unprecedented speed of technological and social changes during the Fourth industrial revolution, it is impossible to hope that the desired outcome can be obtained solely with the help of state legislation and economic incentives. By the time legislation comes into force, it often becomes outdated, disconnected from reality or redundant. The only way to guarantee positive results is a further revolution of values" (as cited in Schwab, 2018, p. 55).

The analysis of the above approaches to the prospects of the development of law in the context of the implementation of the NBICS initiative pushes legal science to rethink the established ideas about the relationship between the content and form of law. Supporting this direction of scientific research, it seems appropriate to point out that within the framework of convergent technologies, the concept of "intuitive interface" appeared at the stage of its origin. This tool allows users to perceive computer information and interact with an electronic computer without special knowledge. Adapting Losev's (1978) teaching on the subject of aesthetics to the legal sphere, it should be recognized that, ideally, the law should be such an "intuitive social interface" that ensures the interaction of people without the need for them to obtain special legal knowledge. It seems that when the law reaches such an expressive form, it will be permissible to talk about its real beauty.

At the same time, it is categorically difficult to agree with the position of Skinner that digitalization, which is one of the manifestations of the NBICS initiative, will entail the loss of the need for professional lawyers. Indeed, these technologies contribute in many ways and will contribute even more in the future to the automation of the lawyer's work. As a result of their application, there will be a change in the relationship between the form and content of the law, and the law itself may acquire new characteristics. However, society cannot afford to abandon the work of lawyers and replace them with artificial intelligence. Moreover, their importance will only increase in public life, and consequently, the requirements for their level of qualification will also increase. This author's position is conditioned by the fact that the cognitive apparatus of law assumes direct participation in making legal decisions of a person who has not only intelligence but also will (Chernogor, Emelyanov, & Zaloilo, 2021, 2022a).

Recognizing the law as an "intuitive social interface", the authors do not claim primacy in this approach. At the beginning of the twentieth century, Petrazhitsky (1908), turning to the problems of the essence of law, approached the solution to this cognitive problem through the synthesis of jurisprudence and psychology. At the same time, it was emphasized that legal communication, like any other, is accompanied by a variety of active and passive experiences that determine human behaviour. Relationships between people can be represented through a set of subjective rights and legal obligations of their participants. Other persons' debts (legal obligations) come first. In turn, objective right is the relationship between active, expressed in subjective rights, and passive, reflected in legal obligations, and psychological processes occurring in the minds of participants of the legal relationship.

Based on these arguments, Petrazhitsky

(1908) concludes that it is necessary to distinguish positive components in law, established by people, and intuitive components, reflected in human consciousness. Positive law is formulaic and dogmatic, and it is not capable of self-development. Intuitive law, on the contrary, ensures the adaptability of the legal order and its ability to adapt to a specific situation. It is it that is the basis for the self-development of the legal order through the correction of positive law. This approach allows us to take a fundamentally new look at the relationship between content and form in law, recognizing positive law as an expressive form and intuitive law as content.

The integration of aesthetic methods into philosophy and the theory of law requires two simplifications at once. The first of them is that aesthetic representations are representations of beauty. According to the second, beauty is an objective reflection of expediency. The latter is of fundamental importance, assuming that people like what is convenient, practical and can be used without unnecessary difficulties. In other words, the beauty of law is the highest level of expediency of social regulation by means of its tools and the highest degree of harmonious correlation and interaction of contradictory elements in its structure. It should be noted that law, considered as an expression of social existence, and modern law, which is a universal social regulator, are much more complicated than theoretical abstraction, as indeed everything in this world is.

As noted above, legal science has not yet sought to establish general laws and principles of the genesis of law through the knowledge of its aesthetic component since it is very problematic to do so. The aesthetics of law has the features of a huge and often quite spontaneous subjective understanding of the law. The law, as a rule, reflects only those socio-consolidation processes that characterize social development at a certain historical stage. And only some representatives of philosophy, sociology and theory of law addressed their issue within the framework of sociological or integrative approaches to the comprehension of law (Carbonnier, 1986; Durkheim, 1996; Gurvich, 2004; Lazarev, 2016; Petrazhitsky, 1909).

The noted "spontaneity" in the aesthetic perception of law leads to a mixture of various concepts and theories, approaches and methods, legal institutions and families with a constant tendency to differentiated functioning with an undoubted need for integration, at least in their holistic perception. It is the constant combination of seemingly multidirectional processes of differentiation and integration, cooperation and competition, convergence and divergence in social life that stimulates legal construction, making it purposeful, determining the need of society for awareness of legal realities. At the same time, such inconsistency causes certain chaos in the knowledge of the law. One of the means of overcoming it is the development of the aesthetic doctrine of law (aesthetics of law). This approach will allow us to reveal the essence of law not through the analysis of individual norms and institutions, systems and families, interests and subjective rights, but primarily as an integral phenomenon in which measure and harmony, catharsis and calocagacy, grace and imitation, taste and ideal can be distinguished.

The aesthetics of law is based on the primacy of beauty – the beauty of the law. There can be no doubt that the law is based on coercion and is ensured by it. The highest form of coercion is physical violence, which involves ignoring the will of a person through a negative impact on his body, even allowing death. At the same time, this circumstance does not prevent the admiration for the depth and content that we feel in relation to the statements of ancient Roman lawyers or certain norms of modern law. The statements of ancient Roman lawyers in their expressive form could only be compared with mathematical formulas, having an equally capacious and precise meaning. Their logic met the requirements of completeness, independence and consistency, and the content was within the limits of necessary and sufficient. It is no coincidence that Hegel (1990) emphasized that there are no categories of writers who, as far as the sequence of conclusions from these principles is concerned, would deserve to be put on a par with mathematicians like the Roman jurists (p. 31).

If classical Roman law is a stable system, then modern law is in a condition of transformation. The stability of classical Roman law, achieved as a result of the final formalization of ancient society, its balance, allows us to assess the depth and perfection of the legal thought of that period. Roman law, by virtue of perfection, outlived its institutional basis – the Roman community – and formed the basis of the legal

systems of most modern states. In turn, the instability of modern law, which has quite objective prerequisites associated with the current social transformation, causes numerous critical statements against it.

Transformations of social reality are largely due to modern technological innovations, expressed in the emergence of NBICS technologies, where the interaction of law and mathematics acquires completely new forms and directions, the awareness of which is possible primarily through the cognitive tools of aesthetics.

Firstly, for the aesthetics of law, the most significant is not only the form of positive law, be it legislation or judicial precedents. The main thing is the depth and completeness of the reflection of social relations in it. Secondly, the law is the bearer of public wisdom, a kind of code of accumulated human experience, which is the basis for the legal programming of social behaviour (Chernogor, Emelyanov, & Zaloilo, 2022b). By influencing individual and public consciousness, law, being properly ordered and structured, in which its beauty is primarily expressed, provides a deeper and more complete ordering of social relations.

Samples of this side of the legal impact are always "convex", which is reflected in the immutability of the relevant legal acts for a long time. Such an example is the US Constitution, which, having been adopted at the end of the XVIII century, remains relevant at the present time. It is appropriate to recall the civil codes of some European states (for example, the Code of Napoleon or the German Civil Code). Developed in the XIX century, they, having ensured the transition from feudalism to capitalism, from an agrarian society to an industrial one, retain their regulatory potential even in the conditions of the current technological revolution, which presupposes another cardinal restructuring (reformatting) of the social order.

Thirdly, only the achievement of a modern technological level has allowed us to approach the realization of the aesthetics of law, free from the corresponding influence of morality and religion, from the need for the direct application of moral and religious norms in legal regulation. The law should occupy an independent place in the individual and public consciousness, free from "sacred crutches" and ethical foundations. Law becomes a truly universal social regulator, addressed to humanity as a whole and not to individual communities – territorial, professional or religious. At the same time, it continues to need external sources of legitimacy at the present time.

It should be emphasized that it was the development of mathematics that contributed to the emergence of NBICS technologies and currently ensures their projection into the sphere of law. However, such a projection, according to the author's opinion, is impossible without using the potential of aesthetics. It is the analysis of law from the perspective of aesthetic categories that allows us to establish the main directions of the introduction of these technologies into legal reality. In a certain sense, we can talk about the presence of law, considered as a universal social regulator, of its own, and quite accurate, "geometry", which subjectively proceeds from a person's emotional perception of justice and legality, without which the emergence of a truly effective mechanism of legal coercion would be impossible.

A person's subjective perception of the sources of legitimacy of law can also be described mathematically. Aesthetic categories, reflecting the qualitative aspects of law, can be measured in some way, that is, presented in quantitative terms. A "projective geometry" may appear, which, although it describes human feelings, may nevertheless have the accuracy characteristic of mathematical sciences in general. Thus, the subjective perception of the legitimacy of law, reflected in the aesthetics of the latter, being indifferent to specific social relations, can have its own scientific description that translates the legal impact to a new technological level. In this regard, the connection between science and the sense of beauty can be characterized by the words of Leonardo da Vinci, who claimed that philosophy and wisdom are only painting (as cited in Losev, 1978, p. 55). With regard to the choice of the method of measuring the qualitative aspects of law and their representation in quantitative indicators, one should also not lose sight of the cognitive possibilities of aesthetic analysis. They are very multifaceted and allow you to get more than unexpected results.

Conclusion

Currently, the law is in a condition of structural crisis, which causes a general transformation of social regulation, within which modern law will move into post-modern. One of the manifestations of this condition of law is the "aesthetic" crisis.

Modern law consists of legal norms, which are understood as some generally binding formally defined rules (models) of behaviour secured by state coercion. They are addressed to an indefinite circle of people who should correlate their behaviour with them. The development of this idea marked the rejection of the causality of legal regulation and allowed modern law to become a universal social regulator. In turn, postmodern law, in order to move from the condition of a self-regulating system to the condition of a self-developing system, requires new legal patterns (patterns of behaviour), which, being used along with legal norms or even instead of them, would allow the law to return the ease of its perception, the beauty of the formulation of its prescriptions, which were characteristic of classical Roman law.

NBICS technologies act as a kind of agent of law transformation, as their implementation accelerates social interaction. However, the application of these technologies in social regulation involves the construction of various mathematical models that require some tools for calculating the legitimacy of law and its qualitative characteristics. It follows from the above that it is the aesthetics of law that can form the basis of this toolkit. Consequently, if convergent (NBICS) technologies are recognized as agents of the transformation of law, then legal aesthetics is a catalyst for the corresponding processes.

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