Onto-Logic of Law

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ABSTRACT
The article discusses the logical problems of law from the ontological point of view. The ontological criterion classifies views on the relationship between law and logic, which distinguish three basic concepts. According to the first concept, a philosophical one, law is logic translated into natural language, and logical ontology is the only ontology of law. The supporters of another concept, socio-legal one, reject the idea of the logical ontology of law as the only one, arguing in favor of a broad understanding of the law and narrowing the sphere of logical analysis of law. The third concept, peculiar one, relies on the idea that the right has its own logic, which acts as its ontological basis. The authors consider the logical problems of the legal impact system in the context of these concepts. They argue that positive law is not a formal system in the strict sense which prevents the widespread use of logical means in its study. The article considers the logical paradoxes of legal impact, showing the impact of basic attitudes and stereotypes of legal consciousness and legal culture on positive law. It concludes that the ideas and beliefs underlying the dominant models of legal culture and legal consciousness influence lawmaking through conceptual dynamics: socio-cultural accents of understanding legal phenomena and processes often penetrate into the field of positive law (while maintaining the unity of terminology), violating the principle of logical consistency. The authors conclude that logic is not an ontological principle of law (since legal ontology is defined by the characteristics of the original social order modeled in legal regulations), and, moreover, the system of law has not developed an independent type of logic.
***Keywords**: law, logic, legal consciousness, legal culture, legal concept, legal impact*

1. INTRODUCTION

When the Austrian mathematician K. Gödel obtained American citizenship, during the interview he noticed that the Constitution of the USA is not logically complete, meaning that its provisions, formally and logically interpreted, do not exclude the establishment of dictatorship. This episode reflects the immanent interrelation of law and logic as *thinking systems*: laws in the legal sense are inevitably subordinated to the properties of logic (such as certainty, consistency, validity and consistency), thus expressing the effect of logical deduction laws [1, p. 573]. In this regard, it is possible to consider the relationship between law and logic as one of the fundamental methodological problems of legal science. According to *Frederic R. Kellogg*, "law is no more than a socially interpreted logic" [2, p. 146], but if we extend this approach to the field of legal relations as forms of *public* relations, it will inevitably be problematic in terms of *understanding the logic of law*. We can formulate this problem in the following terms: *whether the logic of law is a logic in its own (formal, deontological) sense, or the logic of law is a special kind of logic, legal logic as its independent form?* In philosophical-methodological context, it is reasonable to consider the approaches to solving this problem from the position of law ontology.

The first approach, based on the idea of equality between law and logic as formal systems, *makes law appear as a form of a logical ontology, the expression of laws of logic in legal regulations.* According to *Lee Loevinger*, this approach, we denote it as philosophical one, dates back to Aristotle's philosophical developments and was most clearly expressed in the methodology of the scholastic school lawyers, where the logic and dialectics of Aristotle became the main means of *Corpus Iuris Civilis* research [3, p. 471]. *Ronald Dworkin* supports this position, as he compared the principles of jurisprudence with the laws of formal logic and found unconditional similarities between them; thus, according to Dworkin, the principle of resolving conflicts between legal norms is similar to the logical law of the excluded third ($A \vee \neg A$): *"If two rules conflict, one of them cannot be a valid rule"* [4, p. 27].

The jurisprudence itself comes to a different view on the problem of the logic of law. . *Oliver Wendell Holmes Jr.*, Judge of the Supreme Court of the United States, begins his famous study of common law (*The Common Law*, 1881) with the following statement: *"The life of the law has not been logic: it has been experience"* [5, p. 1]. This saying traces the influence of German Pandectists, and before all the developments of *Rudolf von Ihering*; in the

third volume of his famous work "The Spirit of Roman Law," R. von Ihering wrote: "Any complete cult of logic, which seeks to stir up jurisprudence to the mathematics of law, is a misconception and is based on a misunderstanding of the essence of law" [6, p. 311]. The arguments of opponents of understanding the law as normatively expressed formal logic came down to and come down to the fact that the language of logic is not suitable for legal description of legal relations, that many legal prescriptions directly contradict the rules of logic and, finally, that the logical form of presentation of normative acts cannot replace their socio-cultural and political-economic grounds [7, p. 470; 8, pp. 19-22]. This approach, we will call it socio-legal one, treats logic no longer as the only ontological form of law, but only as a formal means of expression and interpretation of regulatory requirements. In this sense, logic appears as a form of textual law expression, and therefore as one of its ontology forms.

In ontological sense, another point of view on the relationship between law and logic is also formed in legal science itself. Due to the corresponding concepts, logic does not form the content of law, but, simultaneously, it cannot be understood as a form of its ontology: the supporters of this concept claim that law has its own legal logic, which is understood as one of the types of the latter; this legal logic is neither the ontological content of law, nor the form of its ontology, but represents as the ontological basis (principle) of law. *Morris R. Cohen* most consistently conducted such a viewpoint in his studies [9, p. 636]. S. Alekseev, a Russian lawyer and law theorist, draws similar conclusions: "Logic of law is not identical to formal, mathematical, algebraic logic, or any other... It is a special, exactly legal logic" [10, p. 357]. "This is... logic in terms of the imperative of the thinking movement within the framework of formed legal practice and reflection of professional thinking of legal constructions" [11, p. 262], another Russian researcher N.N. Tarasov comments on this statement. Thus, due to the approach under consideration, which we will call peculiar, the right has its own logic, which is its principled basis.

So, there are three approaches to solving the problem of correlation between law and logic in an ontological way at the moment, which we designated as philosophical, socio-legal and peculiar. In addition to the obvious theoretical significance, the resolution of this problem has a significant applied value, first of all, in that it allows to answer the question about the limits of legal activity (mainly, judicial settlement of disputes), legal consciousness and legal culture. In this regard, while trying to answer the question about the relationship between law and logic, we formulate a number of introductory remarks.

First, the plan of considering the relationship between law and logic is limited to the framework of understanding the law. It is traditional for legal thought to have two fundamental types of legal understanding: positivistic and jusnaturalistic [12, p. 102; 13, p. 2434; 14, p. 1082]. Along with them, there is also a sociological type, which is based on the idea of law as a phenomenon of social order, whose initial (prenormative) properties are mediated by the characteristics of the socio-cultural plan. The work [15] presents one of the fundamental studies of the theoretical and methodological bases of sociological legal understanding in the modern theory of law. In this sense, the initial approach to legal understanding is largely mediated by the context of considering the relationship between law and logic. Consequently, the starting point in this study is to define our approach to understanding the law.

Secondly, when speaking about the relationship between law and logic, we should consider the heterogeneity of logic as a research area. Logic is usually considered in a formal form, but there are many other types of logic along with the formal logic itself. For example, philosophical literature quite widely discusses the specifics of non-classical formal logic (multi-digit, modal, etc.), symbolic, dialectical, and informal logic. At the same time, logic itself is traditionally considered in the context of *formal systems* [16, p. 491; 17], systems of abstract objects, relations between which are defined by semantic operators. This fact also significantly influences the choice of the initial model of law (type of legal understanding) for the purposes of determining its relationship to the logic in the ontological interpretation.

Therefore, the selected methodological strategy is of fundamental importance for the purposes of this study, and its main provisions will be set out below.

2. MATERIALS AND METHODS

The distinction between object and subject is fundamental in any theoretical study; M.R. Cogen was one of the first to identify this methodological problem in twentieth-century philosophy and noted that there is "a *necessary connection* between objects as fragments of the original sphere of cognition and their diverse interpretations - objects" [18, p. 675]. In this regard, the central object of this study is the right *per se* and the subject matter is its logically significant properties as a formal system. However, it is the properties of an object that determine the nature of the cognitive process, the initial philosophical and cognitive attitude that forms the theoretical plan of consideration of the object - its conceptual image, essential and natural characteristics [19, p. 33]. In this context, the law is justified as a phenomenon of ideal order reflecting the subjective image of the system of legal influence in individual and collective consciousness, mediated by the initial material and empirical characteristics of social reality.

In this regard, the main philosophical orientation of this study is the materialistic dialectics considered in the context of the fundamental opposition of the material and ideal. In this sense, defining law and logic as phenomena of the ideal order, we follow the dialectical-materialistic interpretation of *the ideal as a subjective image of the world, its reflection in consciousness* [20, pp. 12-13; 21, pp. 40, 61, 69]. The dialectical categories of material and ideal, historical and logical have methodological

significance in this sense. In the context of the philosophical nature of logic considered in this study along with the law in its own sense, the categories of logical grammar, the basic concepts of logic, acquire the theoretical and cognitive meaning.

The characterization of logic and law as formal systems led to using the system approach as a meta-scientific research tool along with other general scientific methods and approaches (hypothetical-deductive method, methods of analysis, analogies and extrapolations).

The basic categories of jurisprudence form the special scientific level of research methodology in this study. These include the categories of law, legal impact, legal culture and legal consciousness, as well as methods of legal science - legal dogmatics and legal exegesis.

3. RESULTS AND DISCUSSION

The legal positivism prevailing in the continental European tradition considers the law as a system of formally defined norms established by the public authorities (the state as a whole and its specific bodies) and regulating social behavior. Legal positivism limits the validity of a right to a system of positive legal statements, and considers this system as reproducing itself (*idem per idem*), regardless of the characteristics of a historically specific society [22, p. 224; 23, p. 170]. This consideration perceives the law as a textual phenomenon, which contains the formulations of subjective rights, duties and responsibilities, rules of social behavior with respect to immanent *logical relationship* [24, p. 20-23; 25, p. 1164]. In this sense, the main semantic accents of positive legal regulation are reduced to "searching for a logical formula precisely determining which legal rule defines a jurisdictional solution (*decision*)" [26, p. 88]. In other words, positive law becomes a means of formalizing legal consciousness in a logical sense, a system of syllogisms "translated" into the natural language of law.

In a context of the considered approach it seems methodologically correct, at first sight, to consider the relation between logic and law within the limits of the philosophical approach, i.e. definition of law as a form of logic ontology. However, this gnoseological attitude becomes problematic because the language of positive law is a natural language, the semantics of which in many ways does not correspond to the principles of logical semantics (first of all, to the principle of unambiguousness of terms [7; 27, p. 16]). This raises the problem of defining law as a formal system in the strict sense and, consequently, of approaching positive law from the position of formal logic.

To illustrate this situation, we will refer to the content of the Russian criminal law. From the systematic interpretation of Article 49 of the Constitution of the Russian Federation and Articles 5 and 14 of the Criminal Code of Russia (hereinafter - the CC) it follows that one of the features of the crime (along with public danger, illegality) is the guilt, which can be established only by a court verdict that has come into force. Consequently, a person may not be considered to have committed a crime unless his guilt has been proved in court proceedings. The logical formula of this judgment is as follows: S is P^1, P^2, P^3, where predicates (P) reflect the signs of crime - public danger (P^1), illegality (P^2) and guilt established by the court (P^3). However, later the criminal law repeatedly deviates from this formula, mixing the concepts of crime in the legal and factual sense, but continuing to refer to them with a single term. For example, paragraph 1 of Article 38 of the CC regulates the circumstance excluding the crime of the act, such as inflicting harm when detaining the person who committed the *crime*. Analysis of this formulation leads to the conclusion that for the purposes of Article 38 of the CC, the concept of a crime is interpreted differently than in Articles 5 and 14: in a logical sense, it already excludes the P^3 predicate, replacing it with the P^4 predicate reflecting the *actual* culpability. In other words, there is a logical violation of the principle of unambiguity, when for the same *S mutatis mutandis* are different sets of predicates: P^1, P^2, P^3 and P^1, P^2, P^4.

Even more paradoxical in the logical sense is the correlation between the provisions of Article 8 and Part 2 of Article 31 of the CC. Pursuant to Article 8, the basis of criminal liability shall be the commission of an act by a person containing *all* elements of the crime, which, as it follows from the above, includes the culpability established by the court. However, paragraph 2 of Article 31 of the CC provides that a person *who has committed* a crime shall be exempt from criminal liability on condition of voluntary refusal to bring the crime to its end (in fact, to fulfill the objective part of the crime).

In the system of formal logic, these provisions of the criminal law will look as follows:

$$a \wedge b \wedge c \Leftrightarrow p$$
$$o \Leftrightarrow p$$
$$\neg o \Leftrightarrow ((a \wedge \neg b \wedge c) \Leftrightarrow p)$$

It follows from the above logical formula that the crime (p) possesses a number of characteristics, including an unlawful act (b) and entails criminal liability (o). Thus, criminal liability comes when and only when a person has committed a crime that meets the necessary attributes. However, if a person *has committed a crime in fact*, but did not complete it (did not perform the objective part), then he is exempt from criminal liability. In other words, in this case the fact of committing a crime *per se* does not entail criminal responsibility. In this sense, there is a mixture of concepts of crime in the legal (formal) and actual (social) sense.

Finally, formal syllogistic often deduces objectively incorrect conclusions from premises formulated in the language of the law. We will consider the following syllogism as an example:

all S are P (big package)
some S are X (small package)
some X are P (conclusion)

However, if we define class S as rights in rem, class P as absolute rights, and class X as limited rights in rem, then we can conclude from this syllogism the following: some

limited rights in rem are absolute (which is certainly not true).

So, even being represented as a formal system in positivism, the right is not always subject to strict logical interpretation. In this sense it is impossible to recognize the right as a form of logic ontology, that in turn means methodological one-sidedness of the philosophical concept of correlation between law and logic.

The key reason for this situation is that the basic attitudes and stereotypes of legal consciousness and legal culture, as a phenomenon of an ideal plan, have a fundamental impact on the sign-linguistic expression of the law [28, p. 326]. As *Peter Berger* and *Thomas Luckmann* note, empirical positive law is a social construct, it is a certain "arithmetic mean" of all social phenomena reflected in it - the dominant examples of legal consciousness and culture [29, p. 76]. However, in this sense, the legislator has to create a normative model of social reality, which is not in relation to identity, but to heuristic conformity. In this connection, *Michael McCann* and *Tracey March* note that the social construction of the law creates its own conceptual system, but in some cases, explicitly or implicitly, the law refers to the basic (modeled) category, preferring its developed by himself derivative (modeling) category [30, p. 210]. A clear example of this derogation is the conceptual inconsistency of the Russian Criminal Code, in which the *unity of the term* ("crime") *de-facto* implies *multiplicity of notions* (crime as an objective (factual) act, crime as a set of circumstances established by a court). Thus, we see that the basic attitudes and stereotypes of legal consciousness and legal culture (in particular, the established understanding of *the criminal* in the public mind), penetrating into strict formal systems of legislation, limit the application of strictly logical interpretation and understanding of law.

As *Marc Galanter* notes in this context, the law combines the "beginning of *the cultural and symbolic meanings*" [31, p. 127], where the latter is the necessary form of the first [32, p. 34]. In other words, for the purposes of formal and logical interpretation of law, dynamic and vague in content attitudes of legal consciousness and legal culture need an unambiguous conceptual and terminological expression, in a certain sense, in axiomatization which is essentially impossible within the framework of social relations [32, p. 39].

Due to the above, we conclude that logical interpretation of legal statements cannot be carried out in isolation from the factors of subjective, prenormative plan, first of all - legal consciousness and legal culture. In this regard, *Charles D. Weisselberg* writes that the law, axiologically organized on the principle of proportionality of public interests, often goes beyond purely logical considerations, thus limiting the scope of logical interpretation of the law [33, p. 1236]. Moreover, as noted in the literature, logic cannot explain the difference between national systems of inheritance law: only a fundamental study of legal culture as a fragment of *national culture as a whole* can do it [34, p. 291; 35, p. 25]. With this interpretation, the sphere of legal reality is no longer limited to the framework of positive (empirically perceived) law, but represents, first of all, *an ideal phenomenon*, the sphere of objectification of socio-cultural meanings of the *law*. Accordingly, if we accept such an approach as an epistemological setting, then the law is no longer acceptable to consider only as a sphere of social subjectivization of general logical deductions. This, in turn, limits the plan of logical interpretation of the law to the sphere of positive law *only*.

While noting this fact, we emphasize that logical knowledge is strictly formalized, invariant to any subjective factors. However, the perception of the norms of positive law as a self-sufficient logical phenomenon that does not need a broad socio-cultural interpretation unjustifiably limits the legal reality, actually identifying it with one of the *forms* of its manifestation. Therefore, it is unacceptable to substitute logical procedures for the relevant factors in view of positive legal provisions as the sphere of objectification of socio-cultural structures, basic stereotypes and attitudes of legal consciousness and legal culture. In essence, the logic ends where there is (inter)subjectivity, the reality of *subjective thinking*, and thus *the logic of law* essentially becomes t*he logic of legislation* as the only form of law to be considered *idem per idem*. But the logic cannot be applied everywhere: the legislative array inevitably contains the imprint of a subjective, historically specific type of social culture, which is very difficult to be interpreted logically [36]. This is most evident in the field of family and inheritance legislation, cultural rights and legislation on the judicial system.

Thus, the scope of logical law analysis is limited to formal sources and jurisdictional decisions. The above mentioned naturally raises a question whether in this connection one should look for any special logic in the field of law that differs from traditional logic, if to consider sociocultural genesis of written law forms. In our opinion, there is no sufficient methodological basis to give an affirmative answer to this question: it is known that the logics of different kinds arise as a result of reflexion of philosophical and general methodological problems (e.g., multi-digit logic emerged as an attempt of logical refutation of Aristotle's fatalistic argument [37]). Obviously, the law, forming its own philosophical system (in the form of naturalism and other areas of philosophy of law), nevertheless, does not make attempts to rethink or disprove the achievements of philosophy or methodology *in general* with the help of this system. On the contrary, philosophy of law uses philosophical currents and concepts as its own methodological basis (for example, in the phenomenology of law, legal existentialism, etc.). In this sense, it is obvious that the right cannot pretend to form its own logic.

4. CONCLUSION

At the end of this study, we will draw the following conclusions:

1) Currently, the context of the relationship between law and logic is usually shifted to the positive law area. On this basis, researchers argue that law itself, as a formal system,

is the expression of logical laws in natural language. Others took a broad approach to understanding the law and doubted the validity of the logical ontology of law, considering logic as a way to interpret legal norms. Finally, a number of researchers believe that the law has its own logic, which exists alongside the already known classical and non-classical logic. Thus, the question of the relationship between law and logic is a question of the essence of the ontology of law itself, its existential principles.

2) The conducted research shows that the law cannot claim the status of a formal system in its own sense, because it is social in nature and is significantly influenced by basic attitudes and stereotypes of legal consciousness and legal culture. These attitudes penetrate into the area of positive law, reflected not only in its principles, but also in the content of many legal concepts. It is indicative in this sense, the distinction between a crime in the formal legal and social-psychological sense, reflected in the text of the criminal law. This, in turn, leads to a logical paradox in criminal law: to be exempt from criminal responsibility, a person must commit *a crime*, but not in the formal legal sense, but in the socio-psychological sense. This paradox clearly illustrates the enormous influence of the structures of legal consciousness and legal culture on positive law, in the context of which the unity of the term often leads to a plurality of concepts, which in turn contradicts the principle of logical certainty. Therefore, the above does not provide any basis for the identification of law and logic in its own sense.

3) The study concluded that the law is essentially an ideal phenomenon, hermeneutic in nature and, therefore, dependent on the specific features of a historically specific society and the dominant models of legal consciousness and legal culture. As a consequence the plan of logical consideration of the right narrows down to sphere of positive right as the methodological potential of logic essentially narrows down in the event that systems irreducible to set of formal axiomatic statements undergo the logical analysis. Therefore, it is acceptable to speak not about the logic of the law *per se*, but about the logic of the legislation (positive law).

4) In the context of the conducted research, some authors' attempts to prove that the right has its own logic, a special kind of logic, are groundless. Such statements do not find fundamental conformity with the data of history of logic: non-classical logic and its various types arise in the context of attempts to revise the previous philosophy in formalized systems. The law, meanwhile, does not claim to have such a fundamental worldview importance, putting the daily functioning of social institutions and practices on an empirical level at the center of its praxeological contexts. Thus, the law essentially did not rethink the worldview problems within its own philosophy, but turned to the achievements of established philosophical systems. In this sense, one's own logic could not be created within the law.

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