1. ТЕОРІЯ ТА ІСТОРІЯ ДЕРЖАВИ І ПРАВА. ІСТОРІЯ ПОЛІТИЧНИХ І ПРАВОВИХ ВЧЕНЬ. ФІЛОСОФІЯ ПРАВА

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THE LOGIC OF LAW: POST-REALITY AS A NEW LEGAL ONTOLOGY

Every previous era of social transformation adapted legal categories without touching the ontological foundations of law itself. Today, the picture has changed fundamentally: the latest digital technologies (artificial intelligence, blockchain, augmented reality, decentralized networks) do not merely complicate social relations but alter the very nature of social space, subjectivity, and time. Classical legal ontology, shaped during the Enlightenment, proves incapable of encompassing relations that genuinely exist yet fall outside any of the available legal categories. This gives rise to the phenomenon that the article proposes to define as the «legal vacuum of post-reality». The study aims to conceptualize «post-reality» as an independent ontological category, to demarcate it from related concepts (Baudrillard's hyperreality, Barlow's cyberspace, Latour's actor-network theory), and to establish the theoretical groundings of a novel legal ontology able to confront the challenges of the post-real environment. The methodological basis comprises ontological analysis combined with philosophical-legal synthesis, conceptual analysis, structural comparison, and legal modelling.

The study establishes that post-reality is defined by four interrelated characteristics: the simultaneous coexistence of physical and digital spaces as a single social environment; the operation of algorithmic systems at a pace fundamentally incompatible with legal procedures; the delegation of legally significant actions to autonomous algorithmic agents; and the nullification of territorial attachment as the basis for determining applicable law. Collectively, these features undermine four postulates of classical legal ontology: spatial monism, the personalism of legal subjectivity, causal determinism, and temporal linearity. The article proposes: a concept of spatially neutral jurisdiction grounded in the personal connection between a subject and a legal order; a hybrid model of legal personality combining limited

subjectivity of algorithmic agents with the subsidiary liability of human subjects; and a dual-vector approach to temporal incompatibility through the interplay of legal and technological adaptation.

Keywords: *post-reality, legal ontology, digital transformation, artificial intelligence, blockchain, legal personality, jurisdiction, algorithmic agency.*

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Логіка права: постреальність як нова правова онтологія

Кожна попередня епоха соціальних перетворень адаптувала правові категорії, не торкаючись онтологічних підвалин права як такого. Сьогодні ситуація принципово інша: новітні цифрові технології (штучний інтелект, блокчейн, доповнена реальність, децентралізовані мережі) не просто ускладнюють суспільні відносини, а змінюють саму природу соціального простору, суб'єктності та часу. Класична правова онтологія, що сформувалася в епоху Просвітництва, нездатна охопити відносини, які реально існують, але залишаються поза межами наявних правових категорій. Так виникає феномен, який у даній статті запропоновано визначити як «правовий вакуум постреальності».

Метою дослідження є концептуалізація поняття «постреальності» як самостійної онтологічної категорії, розмежування її із суміжними концептами (гіперреальністю Бодрійяра, кіберпростором Барлоу, акторно-мережевою теорією Латура) та окреслення теоретичних засад нової правової онтології, спроможної відповісти на виклики постреального середовища. Методологічну основу становить онтологічний аналіз у поєднанні з філософсько-правовим синтезом, концептуальним аналізом, структурним порівнянням та правовим моделюванням.

З'ясовано, що постреальність визначається чотирма взаємопов'язаними характеристиками: одночасним співіснуванням фізичних і цифрових просторів як єдиного соціального середовища; функціонуванням алгоритмічних систем у темпі, принципово несумісному з правовими процедурами; делегуванням юридично значимих дій автономним алгоритмічним агентам; нівелюванням територіальної прив'язки як підстави визначення застосовного права. Сукупно ці риси ставлять під сумнів чотири постулати класичної правової онтології: монізм простору, персоналізм суб'єктності, каузальний детермінізм і часову лінійність. У статті запропоновано: концепцію просторово-нейтральної юрисдикції на основі особистого зв'язку суб'єкта з правопорядком; гібридну модель правосуб'єктності, що поєднує обмежену суб'єктність алгоритмічних агентів із субсидіарною (додатковою) відповідальністю людських суб'єктів; двовекторний підхід до темпоральної несумісності через взаємну адаптацію права і технологій.

Ключові слова*: постреальність, правова онтологія, цифрова трансформація, штучний інтелект, блокчейн, правосуб'єктність, юрисдикція, алгоритмічна агентність.*

Statement of the problem. Every major shift in social relations unavoidably produces a crisis in the corresponding normative systems. Legal science has a long history of adapting to new social realities: the Industrial Revolution prompted a revision of property and labour law, the rise of corporations necessitated the elaboration of the legal person doctrine, and twentieth-century globalisation spurred the search for mechanisms of international legal regulation. Yet across all these transformations, the ontological bedrock of law remained unaltered: the legal system operated within a single, homogeneous space, with subjects whose identity and legal capacity were amenable to unambiguous verification, and in time that corresponded to human temporality.

Technological advances spanning the final decades of the twentieth century and the opening years of the twenty-first have challenged this very ontological homogeneity. The emergence of the Internet, and subsequently of blockchain technologies, artificial intelligence (AI), and augmented and extended reality, has given rise to a qualitatively new condition of social existence, which we suggest defining as «post-reality» [1]. This is neither a metaphor nor alarmist rhetoric. This represents an effort toward a conceptual characterization of an objective ontological shift that demands a corresponding response from legal theory and practice.

The present article extends a line of academic inquiry into the digital transformation of the legal system, within which individual technological aspects (smart technologies, blockchain, AI, and the metaverse) were examined as standalone phenomena [2–8]. This study, in turn, advances a unified ontological framework for their theoretical comprehension.

The state of research on the problem. The issue of how digital technologies reshape the ontological foundations of the legal system continues to remain insufficiently explored in contemporary legal scholarship. Individual aspects of this issue has been examined by S. Chesterman in the context of the limits of AI regulation [9], by K. Mohsin and M. Harris in the field of blockchain technologies and their legal implications [10, 11], and by S. Shi, T. Sourdin, B. Li, G. Lupo, D. Carnevali, Z. Tang, and J. Chaisse about smart adjudication and online dispute resolution [12–15]. A symbolic marker of the qualitative shift in legal reality was the conduct of a court

hearing in the metaverse, documented by A. Guthrie [16]. Notwithstanding the expanding scholarly literature, none of these works offers a unified framework for understanding the combined effect of these shifts on the foundations of law. This gap the present article seeks to fill.

The research aims to establish the substantive meaning of the post-reality concept and its distinction from related concepts; to identify the structural contradictions between classical legal ontology and the circumstances of post-reality; and to outline the contours of a new legal ontology capable of responding to the challenges of the post-real environment.

Presentation of the main research material. The concept of «post-reality" emerges at the convergence of multiple intellectual traditions. In its philosophical dimension, it is akin to J. Baudrillard's postmodernist notion of the simulacrum, in which he described contemporary society as existing within a state of hyperreality – that is, a system of signs that have become detached from their referents [17]. However, post-reality as understood in this article is not a purely epistemological but primarily an ontological category. It denotes a specific, technologically conditioned state of society in which multiple layers of reality exist simultaneously.

Post-reality differs fundamentally from Baudrillard's hyperreality. For Baudrillard, simulacra displaced the real, substituting it with hollow signifiers [17]. Post-reality, by contrast, involves not substitution but multiplication: physical reality does not vanish; instead, it is augmented by new ontological layers possessing their own causality, mechanisms of interaction, and normative claims. This approach is closer to Bruno Latour's actor-network theory, which blurred the boundaries between the «natural» and the «social», between human and non-human actors [18]. Yet even here, post-reality represents a more radical phenomenon. It presupposes not merely a broadening of the range of actors, but the ontological heterogeneity of the very space of social action.

In the legal context, post-reality resonates with the concept of «cyberspace» as a separate jurisdiction, advocated by J. P. Barlow in his «Declaration of the Independence of Cyberspace» [19]. Yet the landscape has shifted considerably since that time. Whereas in the early days of the internet era, digital space existed to a certain degree in isolation from physical space, today's technological realities are characterised by a deep interpenetration of these spheres that renders any separation between them impossible.

Post-reality is characterised by four interrelated structural features, each of which carries direct legal implications.

1. Ontological pluralism. Physical, digital, and mixed (augmented) spaces form a single social fabric in which subjects simultaneously inhabit multiple modes of existence. A person who has concluded a smart contract through a blockchain wallet, registers a plot of land via a digital registry, and while simultaneously engaging an algorithm managing their investment portfolio, is a subject of relations that unfold concurrently across fundamentally distinct ontological layers.

2. Non-linear temporality. Algorithmic processes, smart contracts, and automated systems operate at a pace fundamentally incompatible with human time perception and traditional legal procedures. High-frequency trading algorithms execute thousands of transactions per microsecond; decentralised protocols discharge obligations at the moment a specified condition is met, without any delay for verification or interpretation. Law, by contrast, operates according to a fundamentally different temporality: judicial proceedings last years, administrative procedures - months.

3. Depersonalisation of agency. An ever-growing volume of socially significant actions is performed by human individuals but by algorithmic systems, which erodes the classical understanding of legal personality. If an autonomous algorithm concludes a contract, causes harm, or infringes someone's rights, who bears legal responsibility? Classical doctrine offers a choice between the owner of the algorithm itself, its creator, and its deployer; yet none of these answers is entirely satisfactory in the case of genuinely autonomous systems whose behaviour is not foreseeable even by their creator.

4. Spatial nihilism. Territorial nexus as the foundation of jurisdictional demarcation loses its absolute relevance within decentralized global networks. A transaction executed on the Ethereum blockchain takes place «everywhere and nowhere» simultaneously: the network nodes are distributed across all continents, no sovereign controls the protocol in its entirety, and the transaction itself constitutes at once a registration in a globally distributed ledger [8].

In its fundamental foundations, the contemporary legal system rests upon ontological premises that emerged during the Enlightenment era and were consolidated in the legal codifications of the nineteenth century [20].

These premises assumptions can be distilled to several key postulates:

1. Spatial ontological monism: there exists a single, homogeneous physical space in which legally significant actions occur and to which the corresponding legal effects are attached. It is precisely this space that falls under territorial sovereignty and underpins jurisdictional demarcation.

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2. Subjective personalism: legal relations arise between clearly identified subjects, whether natural or legal, whose legal personality is established by law and remains independent of technological intermediaries.

3. Causal determinism: between a legally significant action and its legal consequence, there exists a traceable causal link amenable to verification and attribution.

4. Temporal linearity: law operates within linear time, which has a before, a during, and an after; within this temporal structure are situated legal deadlines, statutes of limitation, and grounds for liability.

Legal theory grounded in the dichotomy of «physical subject – material object» is structurally inadequate under conditions of post-reality. What emerges is what may be defined as the «legal vacuum of post-reality» – a space of social relations that genuinely exist and require regulation, yet fall beyond the operative scope of existing legal norms. This vacuum has several dimensions. In its substantive dimension, it is evident in the lack of adequate legal categories: what is an NFT (Non-Fungible Token) [21] from the standpoint of property law? What is the juridical standing of a digital avatar in the metaverse that enters into relations on behalf of a real person? [8]. Can a decentralised autonomous organisation be a party to a contract? In its procedural dimension, the vacuum lies in the inability to apply traditional enforcement mechanisms to relations arising within decentralised networks: a court order addressed to an algorithm has no mechanism of execution. In its jurisdictional dimension, the vacuum manifests in the impossibility of unambiguously determining the applicable law for cross-border transactions conducted in a decentralised environment.

A new legal ontology should depart from acknowledging ontological pluralism as a constitutive feature of social existence. This implies that law is called upon to function not within a single space but across multiple spaces, each possessing its own structure and requiring its own regulatory approaches. Such acknowledgment does not amount to a capitulation of the state vis-à-vis technology corporations. Quite the opposite, it is a precondition for effective sovereignty: to regulate digital space, the state must first recognise it ontologically. A practical embodiment of this perspective can be identified in the concept of «spatially neutral jurisdiction» – a jurisdiction determined not by the place where an action is performed, but by the personal connection between a subject and a legal order, regardless of the physical localisation of the relevant relations. The grounds for such a connection may include citizenship, place of registration, place of commercial activity, or the place where legal effects arise.

The principle of the depersonalization of legal agency requires a reconsideration of the very notion of legal personhood. Two principal approaches have emerged in contemporary doctrine. The first is a broadening of the roster of legal subjects: just as the legal entity once became a legal construct enabling collective formations to participate in legal relations, an algorithmic person could serve as an analogous construct for autonomous systems. Certain steps in this direction have already been made: in several jurisdictions, including Estonia and the UAE, discussions are underway regarding the attribution of certain legal capacities to DAOs (decentralised autonomous organisations) [8]. The second approach is the retention of the personalist model of legal subjectivity, but with the elaboration of clear rules for attributing responsibility for the actions of algorithmic agents to human subjects – namely, the owners, operators, and developers of the relevant systems. Neither approach is without shortcomings, and the most likely outcome is a hybrid model combining the limited legal personality of algorithmic agents with the subsidiary liability of the human subjects standing behind them.

Overcoming the temporal incompatibility between algorithmic processes and legal procedures requires a dual-vector approach. On one hand, technological adaptation of law: the introduction of legal mechanisms capable of functioning at algorithmic speed – automated regulatory systems, «regtech», and real-time monitoring systems. On the other hand, legal adaptation of technology: the introduction of obligatory pauses (circuit breakers) in algorithmic systems that have a significant impact on society, and temporal windows within which human intervention and oversight remain possible.

Conclusion. Post-reality is not a metaphor but a precise description of a qualitatively new ontological condition of society, in which physical and digital existence have become inseparably intertwined. This condition is characterised by ontological pluralism, non-linear temporality, depersonalisation of agency, and spatial nihilism – features that collectively undermine the foundational postulates of classical legal ontology.

Legal science faces a choice: either to continue applying outdated categories to qualitatively new phenomena, generating a legal vacuum and regulatory helplessness, or to develop a new legal ontology adequate to the conditions of post-reality. This second path requires a reconsideration of the basic legal categories of space, subjectivity, time, and causality – not to abolish them, but to renew them.

A renewed legal ontology does not entail a departure from law as a normative system; it signals a broadening of the ontological horizon of law to the boundaries of actual social existence. It is precisely in this expansion that the most urgent challenge contemporary legal theory lies.

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