SCIENTIFIC RESEARCH OF THE SCO COUNTRIES: SYNERGY AND INTEGRATION

上合组织国家的科学研究：协同和一体化

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这些会议文集结合了会议的材料 – 研究论文和科学工作者的论文报告。 它考察了职业化人格的技术和社会学问题。一些文章涉及人格职业化研究问题的理论和方法论方法和原则。
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These Conference Proceedings combine materials of the conference – research papers and thesis reports of scientific workers. They examine technical, juridical and sociological aspects of research issues. Some articles deal with theoretical and methodological approaches and principles of research questions of personality professionalization.

Authors are responsible for the accuracy of cited publications, facts, figures, quotations, statistics, proper names and other information.

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THE MODEL OF ADVANCED DEVELOPMENT EDUCATION IN THE INTEGRATION OF THE SHANGHAI COOPERATION ORGANIZATION COUNTRIES

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注释。本文阐述了作者提出的创新型授权教育模式构建理念，该模式旨在应对全球教育体系即将面临的危机，为上海合作组织成员国实现先进发展提供教育范式；　界定了21世纪新型人类意识——数字意识的特征、地位与作用，将其确立为教育体系改革的核心目标，以确保在教育过程奇点范式下培养具备竞争力的专业人才；提出了教育体系从再生产型向创造性授权型先进发展模式转型阶段的平行同步改革假说；　基于赋予学生独立性与无限机会以调动（激活）其主观认知创造潜能，构建了创造性授权学习的概念框架与方法论建议，确立其为新型教育技术。

关键词：先进发展教育；再生产教育；创造性授权教育；教育过程奇点；认知创造潜能；授权；创造力；距离。

Annotation. *The article presents the provisions of the author's concept of the formation of a model of creative-authorized education as a model of education for the advanced development of the SCO countries in the context of the impending crisis of the global educational system; The characteristics, place and role of the new type of human consciousness in the 21st century – digital consciousness – are*

defined as a key goal of reforming the educational system, capable of ensuring the training of competitive personnel in the paradigm of the singularity of educational processes; a hypothesis of parallel-synchronous reform of the educational system at the stage of its transition from a reproductive to a creative-authorized model of advanced development is proposed; A concept and methodological recommendations for creative-authorized learning have been developed as a new educational technology based on providing students with independence and unlimited opportunities for mobilizing (activating) their subjective cognitive-creative potential.

Keywords: *advanced development education; reproductive education; creatively authorized education; singularity of educational processes; cognitive-creative potential; authorization, creativity, distance.*

One of the strategic development directions for the Shanghai Cooperation Organization countries is the further achievement and strengthening of their economic and technological sovereignty. Addressing this complex challenge will require significant restructuring of various sectors and industries of the member countries' economies, particularly education and science.

One of the key, leading and decisive directions for solving this problem is the reform of the entire education system, that is, the system of training qualified personnel whose knowledge, skills and abilities correspond to the latest global achievements of scientific and technological progress.

Today, the SCO member countries face a fundamentally new goal: to create a model of advanced development education based on the integration of the synergetic potential of the countries of the Shanghai Cooperation Organization.

In recent years, SCO countries have been conducting intensive scientific research on strategic areas for the development and integration of national educational systems, and, in particular, new technologies and distance learning methods have been developed and implemented.

The solution to the problem of increasing the synergistic effect of the development of educational institutions of the SCO countries by integrating their innovative and educational potentials was reflected in the concept of creating the SCO University and, in particular, in the launch of educational programs within the framework of such educational projects of the Commonwealth states as programs in IT technologies, energy, ecology, regional studies, nanotechnology, etc.

As part of the collaboration between universities in the Shanghai Cooperation Organization, projects for interrelated educational programs, international student exchanges, and projects for the application of distance learning technologies are being successfully implemented. In particular, online learning platforms for organizing distance learning and recording digital resources for individual disci-

plines, including information systems like Moodle, Platonus, and others, are being successfully implemented.

Events conducted by educational institutions in SCO countries have proven highly effective. The proceedings of the scientific and practical international conference "SCO University – New Horizons of Distance Education: Experience, Practice, and Development Prospects" (April 11–12, 2013, Karaganda) noted that the application of theoretical, methodological, and methodological innovations in education, particularly through the use of e-learning network infrastructure, while taking into account the cultural and national characteristics of the populations of the Shanghai Cooperation Organization countries, yields positive learning outcomes. The work by Svalava G.I. and Khanafiev A.A. "Modern Methods and Technologies of Distance Learning: Analysis of Effectiveness and Development Prospects in the Context of Digitalization of Education" presents the results of an in-depth analysis of the prospects and effectiveness of mastering new educational technologies in the digital learning paradigm. According to the results of the authors' research conducted on the basis of educational institutions of the Russian Federation, the introduction of innovative educational technologies "led to an increase in the accessibility of education by 40%, ... the use of integrated platforms for distance learning, such as Moodle and Coursera" ... allowed to increase satisfaction with the learning process by 35%", the mastery of the material by students studying using distance technologies, by more than 25%, compared to the use of traditional methods. [4]

All this demonstrates the success of implementing technical and technological educational innovations. At the same time, the active implementation of innovative digital educational technologies is signaling the emergence of fundamentally new challenges on an ever-increasing scale. One such challenge is the development of a new type of consciousness—a digital consciousness—among faculty and students.

The fact is that the formation of a corresponding system of knowledge, skills, and abilities is predetermined by the specific historical characteristics of a given era. In the paradigm of the information-digital society, this system is formed through a fundamentally new type of human consciousness—digital consciousness. Digital consciousness is characterized, above all, by a new, specific, formalized type of connection between elements of thought and structures of consciousness. [5] It is this type of consciousness that ensures human adaptability to the fundamentally new conditions of the total digitalization of social processes.

Digital consciousness is a specific model of self-awareness that is modified and developed under the direct influence of the digitalization of social reproduction. It is this model—the model of digital consciousness—that provides intellectual potential and fosters the development of such essential qualities of modern human consciousness as flexibility, creativity, and collaboration.

Digital consciousness should ensure a person's high competitiveness not only in the process of practicing digital technology and technology, but also in developing creative thinking skills, taking into account the accelerating pace of generational technological and technical innovation, ensuring a high degree of flexibility and adaptability to constantly accelerating and changing environmental factors. These qualities are key and decisive in the digital age, determining the high efficiency of human interaction with the natural environment. In the digital age, this knowledge, skills, and abilities expand the potential for interaction in the process of social reproduction.

The leading and decisive tool for managing the digital transformation of consciousness is, of course, the educational process, which ensures the continuous development of digital consciousness skills.

At the same time, the modern education system, in the context of digitalization and digital transformation, is currently experiencing a difficult era of so-called technological singularity. Singularity, in this context, refers to a state where the educational process, under the influence of technological and social change, leads to a situation where well-known and proven pedagogical and socio-psychological tools, methods, and techniques for teaching, upbringing, acquiring knowledge, and acquiring skills and abilities are overwhelmingly unable to adapt to the fundamentally changed circumstances and demands of digital technology.

This state is the result of rapid qualitative changes, primarily in the context of technological singularity resulting from the introduction of scientific and technological progress, when the flow of fundamentally new knowledge, scientific discoveries, and achievements related to the application of information and digital technologies becomes irreversible, uncontrollable, and often unpredictable. At this point of singularity, the previous education system is no longer capable of addressing the fundamentally new, previously unknown problems it faces.

The reasons for the qualitative singularity of the modern education system include, first of all, the development of information and digital technologies, the large-scale transformation of socio-economic processes and the environment, the transformation of geopolitical processes, etc.

The noticeable negative consequences of singularity processes in the modern education system are the obsolescence and inconsistency of the applied methods and techniques of teaching and upbringing (which are essentially catch-up rather than advancement), which ultimately reduces the quality of education and, above all, the possibility of developing divergent thinking, and also leads to a noticeable loss of socialization skills, etc.

The solution to the problem is seen in the formation of an integrated model of a transconfessional and transdisciplinary approach to the educational process, as well as its customization, modification, and adaptation in accordance with the individual needs of students.

The information-digital model of the modern economy poses a challenge to the current educational process and requires its restructuring into a model of advanced development education. In its most general sense, such education implies a focus primarily on the challenges of digital transformation in real time, as well as on the emergence of future challenges as a consequence of the fundamental changes caused by scientific and technological progress. [1]

The inability of currently established educational institutions and instruments to adequately and effectively respond to challenges requires their fundamental change.

The creation of a model of advanced education requires improvements in the system of managing the transformation and formation of a new type of consciousness of students, which requires serious reforms and, above all, the development and implementation of a new methodology, methods and tools for managing the educational process.

Advanced education is designed to ensure the self-development of students based on the development of skills for adaptability to rapidly changing conditions.

The goal of creating a model of advanced education is to develop in graduates the knowledge, skills, and abilities to work in a constantly accelerating changing world.

The main goal of creating such a model is to develop skills for authorized learning based on technologies of cognitive independence, that is, to develop skills for solving cognitive problems.

At the same time, today, the educational technologies of this kind that have developed in practice, which are the result of the widespread introduction and development of skills in working with information and digital technology in the absence of effective mechanisms for social adaptation and transformation of consciousness of students, form in them the ideas and skills of applying and using these information and digital technologies and infrastructure as tools for successfully solving the essence of problems and which are in fact not the creative development of the individual, but its simplified technological reproduction as a consequence of taking into account the psychological characteristics of a person, supporting stable, mutually beneficial contacts with a modern information and digital infrastructure, and in fact having little in common with the educational process of acquiring new knowledge, skills and abilities.[2]

The information and digital technologies used in this way, unadapted to the socio-psychological challenges and characteristics of the information and digital age, have little to do with solving the problem of reforming the modern education system. In other words, today's educational technologies built on reproductive learning models "...are no longer capable of ensuring the active individual development of students capable of solving constantly emerging problems and developing their individuality." [3]

Digitalization of access to educational resources fundamentally changes the way faculty interact with students (planning, organization, motivation, and control over the educational process), which ultimately leads to new educational models of personalization and authorization of the educational process.

The development of information and digital technologies, including communications, has led to the formation of a specific virtual educational model of training and education as a tool replacing the real processes of acquiring skills, knowledge, and abilities adequate to the new conditions and challenges of the information and digital society based on the organization of a new model for managing the mass consciousness of students.

This model virtually displaces and replaces the primary goals of the educational process: the individual, independent acquisition of knowledge, skills, and critical-constructive thinking to address constantly emerging, fundamentally new educational challenges. As a result, this model initiates processes that displace critical and constructive thinking, replacing it with the acquisition of "clip-based" skills in technologies for acquiring, comprehending, and applying knowledge, skills, and abilities specific to the era of total digitalization. This replaces them with technologies of "mass-coercion thinking," which prevent students from mastering the technologies of consistently organizing the consumption of social and educational content that is appropriate for the information and digital space. As a result, a simulacrum of clip-based perception and interaction of consciousness with the surrounding reality is formed and internalized in the minds of students during the learning process, ultimately distorting their true understanding of the world around them.

Clearly, a radical modernization of the entire model of organization and management of society's educational system is needed today in the face of information and digital challenges. The primary strategic direction for addressing this problem should be the transition from the reproductive model of education, currently based on the almost total digitalization of learning processes, to an authorized educational model of advanced educational development, separating intellectual and educational activity from the administrative and bureaucratic digital learning environment into a self-organizing, networked, creative model of authorized education.

The faculty of the Moscow State Institute of International Relations (Department of Innovation Management), the Russian State Social University (Department of Economics, Finance and Capital), and the Russian State University The Gubkin Russian National Research University of Oil and Gas (Department of Digital Economy Security and Risk Management), the North Caucasus Federal University (Department of Economic Security and Audit), and the Dmitrov Institute of Continuous Education (Department of Digital Economy and Management) have developed a concept and methodological recommendations for creative-au-

thorized learning as a new educational technology based on providing students with independence and unlimited opportunities to mobilize (activate) their subjective cognitive-creative potential within the paradigm of digital transformation.

The goal of the concept is to create an environment of creative energy that engages students in the process of self-learning. The methodology also includes innovative tools and methods of presenting theoretical and practical material using Internet technologies. They reveal the specifics of organizing the educational process in the distance learning algorithm, taking into account territorial and temporal disunity with the help of specific set of procedures, methods and forms of organizing the educational process. [6]

The concept and methodological recommendations provide answers to the questions: What should be the content and format of online educational materials; what forms should teamwork take; what delivery tools should be used to facilitate student mastery of theoretical and practical material; what motivators should be used in online learning to successfully acquire knowledge, skills, and abilities; what tools should be used to assess the development of competencies, etc.

The results of testing the developed technology and methodology of creative-authored learning showed that its practical application allows for the development of the ability to think originally and unconventionally, to increase creativity and giftedness, and to productively assimilate the necessary educational material.

The testing of the creative-authorized learning methodology demonstrated the relevance and validity of the proposed concept, the key points of which are as follows:

- independent work of the student is carried out using special teaching aids developed for each discipline in accordance with the curriculum;

- at educational and methodological materials for students are compiled in such a way as to ensure the activation of the process of mastering the educational material and the formation of the necessary system of knowledge, skills and abilities in students;

- the acquisition of new knowledge is achieved through the creation of students' own educational material – not the student's own text, which he composes on the basis of the didactic principle of fragmented, unfinished texts. Here student who studies materials from various sources independently, using cause-and-effect reasoning, substantiates the theoretical positions previously proposed to him in the methodological recommendations, etc.

Thus, the material presented by the student is his own creation, the product of his intellectual activity and the logical conclusion of the study of the topic.

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上海合作组织区域中小企业一体化合作：制度性障碍与数字化前景
INTEGRATION COOPERATION OF SMES IN THE SCO SPACE: INSTITUTIONAL BARRIERS AND DIGITALIZATION PROSPECTS

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注释：本文分析了阻碍上合组织中小企业融合合作的体制性障碍，并论证了数字化作为深化中小企业经贸合作和务实互动的途径的前景。

关键词：中小企业、中小企业主体、融合合作、上合组织。

Annotation. *The article analyzes the institutional barriers that hinder the integration cooperation of small and medium-sized enterprises within the SCO. The prospects for digitalization are substantiated as a means to deepen trade and economic cooperation and practical interaction among SMEs.*

Keywords: *small and medium-sized enterprises (SMEs), SME entities, integration cooperation, SCO.*

Problem Statement. The relevance of the research topic is due to the fact that in the context of reformatting global logistics and production chains, as well as increasing protectionist trends in the global economy, the SCO countries with enormous resource, demographic and technological potential are objectively interested in deepening economic cooperation. Within this process, small and medium-sized businesses act not only as a driver of domestic growth, job creation and economic diversification, but also a key agent of integration processes. At the same time, its interaction at the transnational level faces a set of systemic obstacles that require detailed analysis and coordinated solutions.

The purpose of the study is to conduct a multidimensional analysis of the institutional and operational constraints constraining the development of cross-country cooperation of SMEs within the framework of the Shanghai Cooperation Organ-

ization, and to develop a set of practical recommendations aimed at creating a favorable ecosystem for their integration interaction, with a special focus on digitalization tools.

Despite the goals of deepening trade and economic cooperation proclaimed in the founding documents of the SCO, the practical interaction of SMEs remains at an insufficiently high level, due to a number of factors.

Main Analysis. Thus, the key problem is the heterogeneity of national legislative systems, manifested in the absence of unified product certification standards, complex customs procedures, differences in tax administration and intellectual property rights protection, which, in turn, creates an atmosphere of legal uncertainty and increases transaction costs for small businesses that do not have significant resources to overcome them.

The legal basis for cooperation within the SCO is laid down in such fundamental documents as the Agreement between the SCO member States on Cooperation in the Field of Trade and Economics (2003) and the Program of Multilateral Trade and Economic Cooperation of the SCO Member States (2003, with amendments and additions) [1]. However, these framework documents are mainly of a macroeconomic nature and practically do not contain special rules specifically addressed to SMEs.

In addition, an entity engaged in foreign economic activity (FEA) faces the need to go through a variety of administrative procedures: obtaining certificates of conformity (which are not mutually recognized), complex customs declaration (including various forms of certificates of origin), as well as the need to take into account non-tariff restrictions and sanitary standards of each specific country. This is confirmed by the Reports of the SCO Business Council, which have repeatedly pointed out the need to unify and simplify phytosanitary, veterinary and other control procedures.

The lack of a unified regulatory framework also creates barriers to the development of small and medium-sized enterprises in the SCO space. There is no analogue of the «Single Market» or the EAEU general regulations that would harmonize the rules for SMEs within the SCO. Each country is guided by its own national legislation on small business (for example, Federal Law No. 209-FZ «On the Development of Small and Medium-sized Enterprises in the Russian Federation» dated 07/24/2007 [2] in Russia or the Law of the People's Republic of China dated 06/29/2002 «On Stimulating the Development of Small and Medium-sized Enterprises» [3]), the criteria for classifying SMEs (according to the number of employees and revenue) vary significantly, which makes it difficult to form common support programs.

The next problem is financial constraints and logistical disparities. Access to cross-border financing and risk insurance for SMEs remains extremely limited, as

international settlements involve currency risks and high cost of banking services, and the logistics infrastructure between member countries is unevenly developed. This leads to increased costs and longer delivery times, eroding the competitive advantages of small enterprises.

The financial aspect of cooperation is overseen by the SCO Interbank Association (IBO SCO), established to support projects in priority sectors. However, its activities are usually focused on large infrastructure and energy projects involving state corporations and backbone banks.

A typical SME does not have access to the SCO IBO mechanisms. The agreement between the governments of the SCO member states on cooperation in the development of small and medium-sized businesses (signed in 2020) is an important step, but it sets only general vectors of cooperation (exchange of experience, creation of information resources), without offering specific financial instruments.

It should also be noted that there is no specialized fund or bank within the SCO that would specifically deal with microfinance, export credit guarantees, or risk insurance for small businesses. Although settlements in national currencies are progressing (as stipulated in the Joint Statement of the SCO Heads of state following the videoconference meeting on November 10, 2020), they remain extremely difficult for SMEs due to underdeveloped interbank correspondent networks and high conversion costs for small transactions.

Other problems include information deficits and low levels of digital maturity. The lack of a single publicly available digital platform aggregating verified information about potential partners, market conditions, tenders, and legislative requirements creates an information asymmetry, while the disparity in the level of digitalization of SMEs themselves within the SCO countries creates a «digital divide» that hinders effective online interaction.

The problem of information support is recognized at the highest level. Thus, the SCO Development Strategy until 2025 [4] and the Agreement between the governments of the SCO member states on cooperation in the development of small and medium-sized businesses explicitly state the need to create a “single information portal” for SMEs.

At the moment, there is no single, publicly available and multifunctional platform. Existing initiatives, such as the «Single Point of Access to information on export and import operations of the SCO countries» or national portals (for example, «My Business» in Russia), operate separately, often duplicate information and are not integrated with each other. An entrepreneur is forced to independently search and verify information on a variety of unrelated resources in different languages, which requires significant time and labor costs.

The lack of automated translation systems integrated into a potential platform, as well as a significant gap in the level of digitalization of SMEs themselves (be-

tween, for example, Chinese enterprises actively using AI and big data and small enterprises in other member countries) creates an additional digital divide that prevents equal participation in cooperation.

Thus, the analysis allows us to state that further economic integration in the SCO space is impossible without the creation of specialized cooperation mechanisms specifically focused on the needs of SMEs, since the existing model of interaction is more favorable to large corporations with their developed international departments, while small business, which is the backbone of the economies of the participating countries, remains on the periphery of integration processes, which significantly diminishes the potential synergistic effect.

Conclusions. The main recommendations for improving the effectiveness of cooperation between SMEs in the SCO space are the elimination of institutional barriers and the introduction of digitalization mechanisms.

1. We consider it advisable to initiate a multilateral project to create a multilingual interactive online platform that performs the functions of a business contact exchange (B2B-matchmaking), a legal support center with an up-to-date database of regulatory requirements, and a virtual trading house to promote the products of small and medium-sized enterprises to international markets.

2. Development and adoption within the framework of the relevant SCO working bodies (the Business Council, the Interbank Association) of a model agreement on mutual recognition of standards and simplified customs procedures for certain categories of goods produced by SMEs, with subsequent implementation into national legislation.

3. Establishment of a targeted fund or a program of guarantee mechanisms under the auspices of the SCO Interbank Association, designed to co-finance joint ventures of SMEs and insurance of export credits, using the capabilities of national development institutions.

4. Implementation of a program for the exchange of best practices and the formation of educational courses for entrepreneurs on international business, digital skills and intercultural communication, thereby contributing to increasing their export potential and willingness to cooperate.

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工业设施建设领域节能减排保障条件因素分析
FACTOR ANALYSIS OF CONDITIONS FOR ENSURING ENERGY AND RESOURCE SAVING IN THE FIELD OF CONSTRUCTION OF INDUSTRIAL FACILITIES

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注释：本文在国家可持续发展框架下，对影响工业设施建设能源和资源效率的因素进行了理论研究。本文总结了当前的国际方法和实践，特别是欧盟采用的方法和实践，并提出了在俄罗斯建筑行业实施节能措施的概念模型。通过情景建模和比较分析，本文确定了提升工业建筑可持续性的关键驱动因素和制度条件。

关键词：可持续发展、能源效率、理论模型、工业建筑、比较分析。

Annotation. *The article presents a theoretical study of the factors influencing energy and resource efficiency in the construction of industrial facilities, considered within the framework of sustainable national development. The paper summarizes current international approaches and practices, particularly those adopted in the European Union, to propose conceptual models for the implementation of energy-saving measures in the Russian construction sector. Using scenario modeling and comparative analysis, key drivers and institutional conditions for improving sustainability in industrial construction are identified.*

Keywords: *Sustainable development, energy efficiency, theoretical modeling, industrial construction, comparative analysis.*

Introduction. In the context of the global climate challenge and resource constraints, sustainable development is becoming a strategic priority for the economies of various countries. The construction industry, especially in the industrial facilities segment, remains one of the largest consumers of energy and materials. In the absence of comprehensive statistical data for Russia, it is advisable to use theoretical models and international experience to substantiate directions for increasing energy and resource efficiency in this area.

The research methodology is based on logical-structural analysis, scenario modeling and the use of international sources.

The purpose of the study is a theoretical study of the factors influencing energy and resource conservation in the construction of industrial facilities in the context of sustainable development of the national economy.

Results of the original author's research. The theoretical assessment is based on data on the dynamics of energy consumption in construction in the EU countries, where programs for the transition to carbon-free construction equipment, digitalization of processes and the recycling of building materials are already being implemented.

For a better understanding of the dynamics and factors of sustainability in construction, conditional models and theoretically derived tables and figures are presented below. They illustrate the main trends in energy consumption, digitalization, institutional conditions, as well as the ratio of drivers and barriers to sustainable development. Figure 1 shows the conditional dynamics of energy consumption at the stage of construction of industrial facilities (2022–2025), based on EU trends.

Figure 1. *Energy consumption dynamics at the stage of industrial construction (2022–2025) based on EU trends*

Source: developed by the author based on [8]

Before analyzing Table 1, it should be noted that it is a comparative overview of the level of energy efficiency and digitalization in different European regions. These data demonstrate how digital transformation affects sustainability indicators in construction.

Table 1

Theoretical estimates of energy efficiency by region (EU model)

EU Region	Energy Efficiency Index (0–1)	Level of digitalization (%)	EU Region
Scandinavia	0,85	78	Scandinavia
Germany	0,82	74	Germany
France	0,80	71	France
Eastern Europe	0,74	62	Eastern Europe

Source: developed by the author based on [7]

The results of Table 1 show that the highest energy efficiency values are achieved in regions with a high level of digitalization. This confirms the hypothesis of a direct relationship between digital technologies and the sustainability of construction practices. Table 2 summarizes the results of theoretical modeling of the degree of influence of individual factors on the level of energy consumption in the construction of industrial facilities. The use of digital technologies, the use of secondary materials and institutional measures have a significant impact on reducing energy costs.

Table 2

Model of the influence of factors on energy consumption

Factor	Influence coefficient
Digitalization of processes	-0,71
Use of secondary materials	-0,63
Institutional support	-0,59

Source: developed by the author based on [7]

All three presented factors have a significant negative impact on energy consumption, i.e. contribute to its reduction. This emphasizes the need for a comprehensive implementation of digital, environmental and administrative solutions to improve sustainability. Before Table 3, it is important to emphasize that the values presented in it are based on expert assessments. They allow us to determine the priority of certain institutional conditions necessary for the formation of sustainable practices in the construction industry.

Table 3

Expert assessment of the significance of conditions for sustainable construction

Factor	Importance (scale 1-10)
Legal framework	9,2
Financial support	8,7
Personnel training	8,1

Source: developed by the author based on [5; 10]

Experts attach the greatest importance to the regulatory framework, which indicates the key role of government regulation in promoting sustainable construction. Financial support and human resources also play an important role. Table 4 shows the expected growth rates of implementation of technologies for the reuse of building materials and energy-efficient solutions in construction. These indicators are indicators of the maturity of sustainable practices.

Table 4

Forecast for the reuse of waste and the implementation of technologies

Year	Reuse (%)	New technologies (% of objects)
2022	34,0	38,5
2023	39,0	45,0
2024	44,5	52,3
2025	49,0	59,1

Source: developed by the author based on [8]

The projected growth in the use of secondary resources and energy-efficient solutions demonstrates positive dynamics. This indicates the implementation of circular economy principles and the transition to more sustainable construction strategies. Table 5 presents the key barriers and drivers of sustainable development in construction, identified on the basis of analytical models and international experience. These data allow us to build cause-and-effect relationships between policy, technology and the effectiveness of sustainable projects.

Table 5

Barriers and drivers of sustainability (theoretical model)

Category	Element	Level of influence (0–1)
Barriers	Lack of Investment	0,78
Barriers	Resistance to Change	0,72
Drivers	Institutional Incentives	0,81
Drivers	Technological Innovation	0,76

Source: developed by the author based on [8; 9]

Institutional and technological drivers have a higher influence compared to barriers, which emphasizes the potential for sustainable development with targeted efforts. The presented tables together form a holistic understanding of the key factors of sustainable construction. The most significant among them are the level of digitalization, regulatory support and readiness for innovation. Model values confirm that in the presence of a systemic institutional environment, it is possible to achieve high energy efficiency indicators even with limited resources. These dependencies can be used as a basis for strategic planning in construction policy.

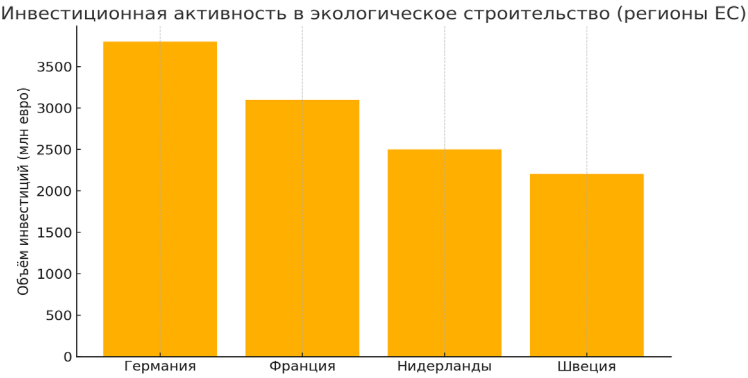

Figure 2. *Investment activity in green construction (EU regions)*
Source: developed by the author based on [3; 6]

The two figures presented allow us to draw important conclusions. Firstly, there is a steady trend towards a decrease in energy consumption per unit of construction output, which indicates the influence of innovative technologies and stricter design standards. Secondly, investment activity correlates with high sustainability standards and regulatory policies. This confirms the importance of the institutional environment for the transition to sustainable construction practices.

The data presented allow us to draw several key conclusions. Firstly, with digitalization and institutional support, sustainable construction demonstrates a steady decrease in energy consumption. Secondly, the degree of implementation of secondary materials and environmentally friendly solutions directly correlates with the level of investment activity. Thirdly, the most significant conditions for progress remain the regulatory framework, access to technology and the qualifications of specialists. Thus, even in the context of a theoretical approach, it is possible to justify the mechanisms for implementing sustainable industrial construction.

The transition to sustainable development requires a comprehensive transformation of economic sectors, including the construction sector, which is characterized by high levels of resource consumption and significant environmental impact. An important area is to improve energy and resource efficiency in the construction of industrial facilities, which requires a scientific analysis of the conditions and factors affecting the implementation of relevant practices. In 2022, energy consumption in European buildings increased by almost 1% compared to 2021. Electricity accounted for about 35% of total energy consumption in buildings, compared to 30% in 2010.

According to the report of the International Energy Agency (IEA) [4], in 2023, there was a 6% decrease in energy consumption in the industrial sector of the European Union after a similar decrease in 2022. This indicates ongoing efforts to improve energy efficiency and reduce emissions.

The implementation of the principles of a circular economy in the construction industry in Europe is aimed at reducing the use of primary resources and reducing waste. For example, in 2023, the European Court of Auditors noted that resource efficiency has remained on the EU agenda for more than a decade, but the pace of progress remains slow. In 2023, renewable energy consumption in Europe and the Commonwealth of Independent States reached 20.4 exajoules, representing a 15% increase compared to the previous year. The low-carbon building materials market in Europe was valued at US$64.12 billion in 2023, with a projected growth of 7.56% per year to 2029. Oslo became the first city in the world to mandate zero-emissions technology for all municipal construction projects on 1 January 2025, significantly reducing noise and air pollution. These findings highlight European countries' efforts to improve energy efficiency and implement sustainable practices in construction and can serve as a benchmark for developing similar strategies in other regions, including Russia. Let us present Table 6, which models how various factors influence the level of energy consumption in industrial construction in Russia, by analogy with international data.

Table 6

Model of the influence of factors on energy consumption (conditions of the Russian Federation)

Factor	Influence coefficient
Government regulation	–0,65
Qualification of engineering staff	–0,61
Digitalization and BIM modeling	–0,69

Source: developed by the author based on [1; 2]

All three factors have a significant impact on reducing energy costs. The effect of digitalization is especially pronounced, which emphasizes the need for large-scale implementation of BIM, IoT and monitoring systems in construction.

The conducted theoretical study made it possible to form a holistic view of the factors influencing the sustainability of industrial construction in the context of the transition to an energy- and resource-saving development model. Despite the limited availability of open statistical data in Russia, modeling based on international practices, primarily in the EU countries, showed the following key points:

Energy consumption in the construction of industrial facilities can be consistently reduced subject to the integration of digital technologies, the use of sec-

ondary materials and the introduction of regulatory restrictions on the resource intensity of processes.

Digitalization (including BIM, IoT, platform solutions) has a systemic impact on reducing costs and increasing energy efficiency, being one of the main drivers of sustainability.

Regional differentiation in the level of energy efficiency indicates the need for a targeted approach and strengthening institutional support in less advanced regions of the Russian Federation.

Institutional factors (legal framework, government support, personnel training) play a key role in creating an environment conducive to the implementation of sustainable technologies.

Forecast models demonstrate that, subject to the implementation of appropriate strategies, Russia can consistently integrate into global sustainable construction processes and reduce the carbon load from the construction sector.

Thus, the theoretical framework and comparative analysis provide a basis for developing strategic and regulatory decisions that contribute to the formation of a sustainable, energy-efficient construction industry in Russia.

Conclusion. The conducted theoretical study allows us to formulate model prerequisites for the sustainable development of the construction sector. Using European practice as an example, it is shown that the combination of institutional support, innovative activity and the transition to closed resource consumption cycles leads to a significant reduction in energy consumption and an increase in environmental sustainability. These findings can be adapted to form a Russian strategy for sustainable industrial construction.

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国外区域增长与发展理论

FOREIGN THEORIES OF REGIONAL GROWTH AND DEVELOPMENT

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摘要：本文对新兴区域增长理论的主要模型进行了分析和系统梳理。文章揭示了这些理论的内涵，并从俄罗斯实际出发，分析了其增长和发展的关键因素，尤其是空间因素，并探讨了这些理论的优势和劣势。

关键词：经济增长、竞争、区域增长理论、模型、生产、乘数、空间滞后、计量经济模型、资源、市场。

Abstract. *This article examines and systematizes the main models of new regional growth theories. Their content is revealed, and the key factors, particularly spatial ones, of growth and development are identified, as well as the strengths and weaknesses of these theories, from the perspective of their relevance to the realities of Russia.*

Keywords: *economic growth, competition, regional growth theories, models, production, multiplier, spatial lags, econometric model, resources, market.*

Beginning in the 1980s, new theories and models of regional growth emerged in theoretical and empirical research by Western economists and economic geographers. The impetus for this work came from recent studies within the framework of new economic geography—a “modernization” of the traditional form of spatial organization of industry that created a set of simple, if not entirely convincing, models of imperfect competition; new trade theory, which used this set to construct models of international and interregional trade under conditions of increasing returns; and new growth theory, which recognizes the primary role of human capital, especially worker knowledge, as an endogenous factor in economic growth under conditions of imperfect competition. Many models synthesized

the tenets of the neoclassical school and cumulative growth theory, supplementing them with some ideas from the institutional school.

Among the most famous representatives of the new wave of regional growth theory are: P. Krugman, M. Fujita, T. Mori, E. Venables, D. Pugo, J. Harris, A. Pred, R. Fiani, G. Myrdal, A. Hirschman, A. Gilbert, J. Gagler, J. Allison, E. Glaser, D. Davis, D. Weinstein, Longgen Yin. The most important among their theories and models are the basic theories of new economic geography, new models of economic growth, theories of agglomeration, central places and random growth, based on increasing returns to scale under imperfect competition (in some cases, under perfect competition). Based on these, they include various types of scale effects, transport costs, factor mobility, agglomeration, spatial lags or multiple effects of the interaction of economic factors among the spatial factors of growth.

Basic theories of the new economic geography. This group includes J. Harris's "market potential" models, A. Preda's "base multiplier" models of regional income, and formalizations of J. Harris and A. Preda's theories (P. Krugman).

J. Harris's "market potential" theory [6]. It argues that, all other things being equal, entrepreneurs will seek to locate their production in locations with good market access. He assessed the degree of market accessibility in each US county using the "market potential" indicator: a weighted sum of the purchasing power of specific locations, where the weight of each location was inversely related to its remoteness. The results of this study showed that developed industrial regions of the US had high market potential, since significant shares of the country's population and production were concentrated in the industrial belt, and, consequently, regions within this belt initially had the best market access. But this observation led Harris to an interesting conclusion: the concentration of production has a self-reproducing function. Firms located production in regions with good market access, but market access improved in regions where production was concentrated [1, p. 122]. The strength of this model is the identification of a new factor—"market potential," or accessibility to a sales market inherent in the very concentration of production in a single standard. Recall that before Harris, economic geographers used economies of scale, transportation costs, and factor mobility in their optimal location problems. Its weakness is that this fundamental rule does not apply to enterprises based on immobile factors of production. For example, a large market for oil and gas is located far beyond the sites of their production.

The "base multiplier" model of regional income by A. Pred [9]. While Harris examines a one-time situation, i.e., in static economies, Pred studied it dynamically. He begins calculating the model with a projection of the region's "export" revenue (from sales of products to other regions within the country and abroad), after which he uses an estimated coefficient of the share of income spent within the region to determine the multiplier on its basis. He assumes that the size of the

export base and the share of income spent within the region should be increasing functions of the size of the regional economy. This means that if a region's economy reaches a sufficiently large scale, it can enter a period of cumulative growth. A large volume of demand in the intraregional market can make local production of goods previously not produced in the region profitable, which will increase the multiplier of the region's export base, leading to further income growth, which will cause an additional increase in production, etc. [1, p. 123].

Formalization of the theories of J. Harris and A. Preda [9, p. 127]. P. Krugman attempted to formalize the theories of these authors in a single model. His model is an economic system consisting of two regions (although the model allows for its expansion to a larger number of regions) and two industries: perfectly competitive agriculture and imperfectly competitive (according to Dixit-Stiglitz) industry. Agricultural goods are produced by farmers, who are characterized by absolute immobility, while industrial workers are absolutely mobile and can move to the region offering higher wages. In addition, the costs of industrial goods (but not agricultural ones) include iceberg transportation costs, where some goods simply "melt" en route, i.e., transportation costs are included in prices at the goods' destinations.

Thus, Krugman identified a pattern in the emergence of regional agglomerations in developed countries, which suggests that market size effects or market access play a more important role in agglomeration formation than economies of scale, transportation costs, and factor mobility. Consequently, the primary cause of uneven regional development or spatial differentiation is market size. Despite this advantage of the synthetic model, like the Harris and Preda model, it fails to identify channels of convergence in regional economic development.

Models and Concepts of the New Economic Geography. Theoretical research within the framework of the new economic geography is conducted within two subgroups of models. One represents an attempt to build bridges between the new economic sector and the traditional theory of production location. The second is based on a new "spatial" interpretation of international trade [1, p. 130]. This circumstance allows us to divide them into different subgroups: 1) models of "modernization" of the traditional theory of production location and 2) models of new types of international and regional trade.

"Modernization" Models of the Traditional Theory of Industrial Location. M. Fujita and P. Krugman's modification of the von Thunen model [4]. This model is a modification of von Thunen's original model in which the existence of a central city is not simply implied but explicitly supported. It also assumes that all labor is mobile, which makes the location of agricultural production endogenous, along with industry. On the one hand, industrial production is concentrated in the city under the influence of bidirectional relationships caused by the concentration it-

self; on the other hand, the concentration of economic activity in the city creates a surge at the point on the market potential function curve where the location of industrial production is determined. Agricultural production is then distributed around this center, with land rent declining to zero as one moves from the center to the edge of the rural periphery. However, according to the authors, such an equilibrium with a single center is stable only if the population is sufficiently small [1, p. 132].

The Fujita, Krugman, and Mori Model. This is the same model, but more complex. Here, the economy is viewed as consisting of several industrial sectors, differing in their transportation costs and economies of scale. They believe that such an economy spontaneously generates a system of central places, which serves as a confirmation (again, only in one dimension) of Christaller's hierarchical model of central places. Furthermore, Fujita and Mori analyzed ports and other transportation hubs from the perspective of their potential to form future cities and found that transportation hubs generate surges in market potential functions, which serve as the "seeds" of future cities [1, p. 133].

Models of a new type of international trade. The model of the cyclical movement of factors by E. Venables [11]. In it, he demonstrated that a cyclical process leading to economic differentiation can exist in the case where there are intermediate goods produced on a large scale, taking into account transportation costs. In this case, a country with a large industrial sector provides a larger market for intermediate goods, which leads to the concentration of intermediate production in this country, the latter, in turn, provides the country with an advantage in the production of goods located even lower in the technological production chain, which further enhances the initial advantage, etc. A similar model is easily applicable to regions within a country, since factors of production are much less mobile at the national level than at the regional level. A positive aspect of this model is the identification of industrial concentration and especially market size as the main factors of the uneven development of countries and regions, although much earlier F. Perroux pointed out the leading role of industry in the formation of "growth poles" in his concept of the "dominant" economy [1, p. 133].

The weakness of the above-mentioned concepts and models of regional growth is the American-centralism in the logic of their thinking (for example, the hypermobility of the labor force factor) and the underestimation of the impact of innovation, new developments, and educational levels on the economic development of countries and regions.

An analysis of theories and models of new economic geography has revealed that, in any scenario (planned or spontaneous), economic growth or development occurs unevenly across space, following a "core-periphery" pattern. This form of spatial development is driven by the emergence of regional agglomerations,

driven by increasing returns to scale, particularly returns to market scale, induced by the mechanism of monopolistic competition. At the same time, intercountry and interregional differences in economic development are somewhat converging due to the industrialization of the agrarian periphery and growing market size or high market accessibility. However, the practice of developing countries and underdeveloped regions shows that it is extremely difficult to ensure industrial development and market expansion in these countries and regions due to very low incomes, traditional lifestyles, the slow variability of social institutions, and so on.

Agglomeration theory – P. Krugman and P. Romer; R. Fiani. According to the theory of P. Krugman [7] and P. Romer [10], the main factor of growth is the accumulation of production activity in certain regions, which provides benefits to enterprises due to an increase in their size or from positive externalities arising from the presence of other firms in the market. According to these authors, the initially uneven distribution of production during the transition to equilibrium leads to the formation of agglomerations. They attribute the emergence of agglomerations to a random factor or link them with the concept of increasing returns to scale. The latter can be different – for example, the flow of knowledge, the merging of labor markets, or savings due to a decrease in the distance between producers and consumers in the presence of costs in carrying out exchange. Ultimately, the cause of uneven development of regions is the agglomeration of production activities of territories [2, pp. 13–14].

The core-periphery model of Myrdal and Hirschman [8]. In this model, the onset of regional development is associated with a random factor, such as the discovery of mineral deposits or the development of food exports. Rising real wages and high returns to capital generate increasing returns to scale and the development of agglomeration, expressed in rising labor and capital productivity as a function of the growth rate of regional output. They believe that the cause of uneven regional development is the level of agglomeration of production activity, caused by increasing returns to scale [2, p. 16].

A. Gilbert and J. Gagler [5] criticize the core-periphery approach, arguing that models of this type underestimate the role of international influence, pay insufficient attention to the social aspects of regional development, such as poverty and income inequality, do not take into account the pre-colonial history of nations, and unjustifiably introduce the assumption that the government acts in the interests of the population [2, p. 19].

Random Growth Theories - J. Allison and E. Glaser, T. Holmes and Stevens, D. Davis and D. Weinstein Random growth theory is an alternative explanation for the emergence of agglomerations. According to it, the emergence of agglomerations is explained by the existence of strong random shocks that trigger economic growth in some regions. J. Allison and E. Glaser [3] showed, using a model of

plant location selection, that even if plants are randomly distributed in space and no geographic advantages exist, industrial concentration will arise randomly, with a positive correlation between the average plant size and industrial concentration. In the location of a very large plant, industrial concentration and the average plant size increase over time.

The advantages of the new theories of regional growth under consideration are: introduction into the models of spatial factors as internal (endogenous) sources of regional growth and imperfect competition, bringing them closer to real life; identification of a new factor – the effect of market size or the degree of accessibility to the market as the main reason for the emergence of agglomerations as a territorial form of industrial production placement; modernization of the traditional theory of production placement based on the spontaneous and explicit formation of the center-periphery; attributing the cyclical movement of production factors to the main reason for the uneven economic development of countries and regions; determining the channels for converging the differences in the development of countries and regions through industrialization of the periphery and expansion of market size or increasing the level of accessibility to the market; determining the increasing returns to the production of services as one of the important factors increasing the differences in growth rates between regions; studying the emergence of agglomeration from the standpoint of increasing returns to scale; explaining the concentration of production or the emergence of agglomerations by random shocks; attributing spatial lags or a multitude of mutually influencing effects to one of the significant factors of polarization and growth of the economies of regions.

Weaknesses of new theories of regional growth include: an underestimation of the role of international influence and social and regional factors; ignoring innovation, innovation channels, and new forms of spatial organization of production—industrial and regional clusters, value chains, the learning economy, and regional innovation systems.

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共产主义是乌托邦、幽灵、恐怖故事和现实
COMMUNISM AS A UTOPIA, AS A GHOST, AS A HORROR STORY AND AS A REALITY

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注释：20世纪60年代，一个实现社会和经济数学最优的体系应运而生。该体系基于双环金融体系和局部"剩余消费者"（SC）标准，该标准由古典资产阶级政治经济学家A. 马歇尔于20世纪20年代初提出。该体系体现了动态最优理论，即最大化经济增长率。在该体系中，所有类型的财产——国有、私有和集体——都在平等的条件下运作。

关键词：动态最优，福利增长，积分标准。

Annotation. *In the 1960s, a system was formulated that realized a social and economic-mathematical optimum. The system is based on a two-loop financial system and the local "surplus consumer" (SC) criterion, formulated in the early 1920s by the classic bourgeois political economist A. Marshall. The system implements the theory of a dynamic optimum, i.e., maximizes the rate of economic growth. Within this system, all types of property—state, private, and collective—operate under equal conditions.*

Keywords: *Dynamic optimum, welfare growth, integral criterion.*

The article deals with the economic and mathematical model of dynamic optimum as a theoretical basis for the maximum possible growth rates of the economy. This model is superimposed with an economic system that provides powerful incentives for the practical implementation of the theory.

Humanity has always dreamed of good things—timely rain, happy children, a humane government, peace and prosperity, and universal love as the norm. Somehow, nothing worked out. In the 19th century, the time of utopias ended and the age of so-called science arrived. At the instigation of Marx, the specter of communism entered society. Marx's teachings were based on the idea that the capitalism that had developed by that time was disgusting, inconsistent with the level of development of productive forces, much less with any vision of a bright future. The path to this future, according to Marx and Engels, would inevitably be strewn

with bones and drenched in blood. This future itself was provisionally called communism. The classics didn't dwell much on the essence of this concept. It remained extremely vague, as if in a thick fog, and its existence was justified only by the inevitable collapse of capitalism. The bloody path to the future appealed greatly to all revolutionaries, and especially to the Bolsheviks. As long as these thoughts lingered in the revolutionaries' heads as a philosophy, the world wasn't particularly worried. Finally, the time of revolution arrived. The slogan was—the main thing is to get into the fray, and then we'll see. The specter of communism, which had so excited the revolutionaries, turned into a thirst for power and the dictatorship of the proletariat—a third of the rich were shot, a third were driven abroad or sent to camps, a third disappeared into the vast expanses of Russia. It soon became clear that "universal industriousness" was not the people's primary virtue. For all those who were promised free labor, land, and factories, but who refused to work for slop, a concentration camp with watchtowers along the perimeter was established. Those who organized this "bright future" and sat in those watchtowers with machine guns were labeled communists, thereby completely discrediting both the people and their ideas. N.S. Khrushchev, in a fit of rage, promised the West to show Kuzma's mother from the UN podium, and promised the Soviet people communism by 1980. Both sides were scared. In 1991, the world breathed a sigh of relief. But Russia was in trouble again. A new wave of idiotic reformers came to power.

And yet, time and science march forward. The current level of public awareness allows us to formulate what is good and what is bad for society as a whole and for each individual, without fantasies or ideological excesses. When used seriously, the word "communism" has become a sign of inadequacy (did you escape from a mental hospital, by any chance?). The word has become outdated, almost a swear word. So, where logical, we will use the neutral term "optimal economy" (OE).

Now, to the crux of the matter. The author knows the formula for an optimal economy. One could describe all its consequences in detail and propose that this be considered communism. The second approach is to lay out everything desired outside of time and space and prove that a certain system achieves it. The first approach, in its purest form, failed. The optimal economy was formulated in 1972, but until 1990, it was rejected by the authorities, the economy as a whole, and individual economists. The elite clung to Article 6 of the constitution, economics as a whole was considered a prostitute of socialism, and those economists who laid the foundation for the optimal economy failed to understand their own ideas and were unable to overcome the red flags of socialist ideology. Since the 1990s, with thundering drums and empty shelves, we have moved on to another branch of economics—the "prostitute of capital."

The theory of capitalism has proven far more complex than the camp's vertical management structure. You can spend your whole life dabbling in capitalist theory and never reach the desired shore. The chaos of the 1990s has passed, and now we're trying to build capitalism with a human face. In particular, to smooth out class antagonisms by applying the legacy of socialism. But this is backfiring on inflation targeting. As in the early 1990s, the role of economics in public administration is minimal. However, in the early 1990s, reformers did everything they could to make plunder and steal comfortably in the chaos. And how can anyone listen to economics when any two economists have three opinions on any issue?

Economics stands apart from all other sciences. The most important thing in science is a hypothesis that it attempts to test in practice, or an adequate, generally accepted theory that allows for predicting the outcome, or a theory of dynamic optimization that maximizes a desired outcome, for example, the rate of GDP growth. Our economic science has none of these. If the car you repaired breaks down after driving a couple of kilometers from the workshop, the next time you'll be fired, you'll be thrown out for a job. In economics, you're safe. To avoid spouting absolute nonsense, read a dozen articles on your topic and form your own opinion. And now you don't even need to read—there's AI. As a result, 70% of economists are simply useless.

So, we are forced to combine two approaches—the virtual one and the one based on the economic system. It turns out that not everything can be extracted from a purely theoretical source. We will mention the economic system very briefly. This is not because we want to preserve professional secrets, but because of the simplicity of the issue.

So, the formula for an optimal economy consists of two axioms: the market and a two-loop financial system.

And that's all there is to it. The rest are hard, unambiguous consequences. However, the market can be left out of the equation. It's like the cosmic microwave background radiation—it's everywhere and always has been. So, one axiom is enough.

We lived under a two-circuit system for 60 years, but without a market, or rather, with a half-dead market. And this system kept the rotten economy of socialism afloat. Now we live in a developed market, but without a two-circuit system. In the 1990s, it was the first to be condemned, so as not to interfere with robbery and theft.

Now we can move on to the formula of communism. Let's start with the main thing. Slavery, serfdom, and wage labor somehow don't fit with a bright future. Humanity survived slavery and serfdom, but it has become fixated on wage labor.

Here, we need to delve into the details. Let's start with capitalism. It is based on three axioms: profit as an integral criterion for enterprise activity, private own-

ership of the means of production, and wage labor. These three socioeconomic foundations of capitalism are tightly interlinked and function only when combined. If anyone is removed, the economy falls apart, and we must transition to a dictatorship of the proletariat and erect watchtowers around the perimeter. This mechanism must be discarded entirely. Each link in this "holy trinity" introduces its own abominations into the overall picture of capitalism. It is interesting to discuss which link is the leading one in this relationship. It is believed to be private property. This opinion is erroneous. The fact is that capitalism is based on profit as an integral criterion, and profit acquires this quality only under the conditions of private property. That is, The owner, the capitalist, or in our language, the "entrepreneur," by appropriating surplus value strives to maximize it and gains an incentive to reduce costs, improve quality, and increase production volumes—in other words, to act in the interests of society. This allows the enterprise to operate autonomously within certain limits, contributes to the stability and viability of capitalism, and is known as the invisible hand of the market.

Profit has significant drawbacks. Profit is saved labor, which society as such has no need for. Society needs cheap goods and services. Profit has little relation to GDP, the primary objective function. Maximum profit is achieved long before market saturation, long before approaching the static optimum. Any increase in production is associated with lower prices, and competition is necessary for even relative market saturation. This mechanism is complex, time-consuming, difficult to predict, and simply highly risky.

Private property induces wage labor and class antagonism, when a tenth of society owns 90% of public wealth, and the rest, the rabble, owns 10%. Wage labor is worse than slavery, since at that time scientific and technological progress was not yet the main driving force. But now it is precisely scientific and technological progress that determines the rate of economic growth, and mercenary labor

The main obstacle in his path. Tearing his shirt off to make the boss an extra million, racking his brains over production problems, and deviating far from the job description—that's not typical of a normal person. If a manager is tasked with assembling a team to solve a complex innovative problem, he'll hear the response, "Screw you, whoever needs to do it, let them come and do it."

The oligarch, appropriating profits, lives under communism ("according to need"), but even for him, these profits are not unlimited. Having bought a 144-meter yacht and a beachfront estate, he will invest the rest (there's no escape) in production. To remain competitive, expensive machine tools and real estate are not enough – the wages of hired workers must be limited as much as possible. Thus, capitalism without private property is a utopia. A two-circuit system allows this triad, i.e., capitalism, to be consigned to the dustbin of history.

Instead of the oligarch, a two-circuit system and collective ownership are proposed. In life, we have concepts such as collective labor, collective ownership,

community, team contracting, cooperatives, and, finally, people's enterprises. All of these have proven unviable. However, family and small businesses have become perfectly integrated into our lives. This doesn't change the fact: a profit-maximizing collective is society's worst enemy.

The national consumption fund is made up of enterprise contributions at a standard rate per full-time employee and is divided into two parts: a tax paid to the state and a consumption fund for employees of commercial enterprises. Profits belong entirely to the enterprises but cannot be converted into wages at either the state or enterprise level. However, they can be exchanged at a price that balances supply and demand (no one thought to implement this mechanism under socialism; life would have been easier).

A fixed consumption fund is divided by the price reduction amount (the FP ruble is determined per SSP ruble). Next, the consumption fund for industries is determined for major commodity items (dairy, fruit, cars, etc.). This fund within each industry is divided among enterprises based on the amount of added value. Added value, as is well known, is determined solely by external control (input-output), which excludes tax accounting. (Enterprises can be of any type of ownership—all operate under the same conditions.) The wage fund is calculated not for individual employees, but for the team as a whole. All positions are elective. Ratings are determined by professionalism, contribution to the company's efficiency, and the employee's social integration into the team. If the ratings are unfair, the team will fail, will sit on the social tariff for a while, and then, like a cork, will fly out of the market. Managers and owners do not determine employee salaries. The employee determines the rating by universal suffrage, and salaries are distributed according to the rating, including owners, management, research departments, and external employees. It is impossible to determine the consumption fund in advance; it may differ by an order of magnitude from previous periods and depends on market conditions, which the enterprise has little influence on unless it is a monopolist, and labor productivity (the amount of added value).

Capital gains are distributed among employees based on the total wages for the reporting period. Labor productivity, and consequently the consumption fund, may differ between strong and weak teams. Enterprises' main reserves are innovation, team cohesion, professionalism, quality management, and, as a foundation, the equitable distribution of the welfare fund. The entrepreneur remains the foundation of the economy. They are the center of the collective's crystallization around their organizational talent and innovative ideas. From this perspective, farming in the 21st century is demagoguery. Agriculture is the most complex field of activity from an innovation standpoint. A broad division of labor is required: veterinarians, machine operators, the latest equipment and its repair, market connections (purchases and sales), the introduction of varieties and genetic advances, agronomists and animal scientists with higher education, and science at every level.

During Soviet times, there were glimpses of communism. But they were treated as criminals. These were the gold mining teams of V.I. Tumanov. Tumanov himself escaped from the camps six times. These gold mining teams, formed from declassed individuals, using waste dumps and decommissioned equipment, produced significantly higher labor productivity. Each team was initially charged with a criminal offense, which languished until it was shut down. After receiving the money, 20% of them completely drank themselves to death. The rest became the social elite. One of the team members, many years later in America, admitted that he had been extremely lucky and that that arduous labor had been the happiest time of his life. It's unlikely he explained this phenomenon convincingly. The free labor of freely assembled people was as unfamiliar and far removed from reality as communism.

There was also the team contract in construction. It led to an explosive increase in labor productivity. Both gold artels and team contracts undermined socialist ideology, so the authorities treated them with a savage hatred.

But this has little to do with communism. What's needed is a stable, established team, elections throughout the entire chain of command, investments, loans, scientific support, continuous professional development for all employees, and a long-term innovation plan.

In the UAE, everyone on the public sector automatically increases their well-being every year due to lower prices as the economy grows. The value of the salary ruble is also rising in the commercial sector of the economy.

However, this is only part of the overall picture - there is also the economic and mathematical side of economics.

Currently, the main objective function of the economy is the growth rate of GDP, which includes rockets, tractors, and oligarchs' yachts. In the OE model, the global objective function is the integral of the welfare curve discounted to the current moment over a reasonable interval. This has little to do with GDP growth. Guns and butter, flies and cutlets, should preferably and naturally be considered separately.

If there is an objective function, then naturally there must be a theory of dynamic optimum. An optimal economy must adhere to the theory and realize the maximum rate of welfare growth.

At the national level, the discount interval is determined by the implementation timeframe of major infrastructure projects. At the corporate level, the objective function is the same, but the discount interval may be limited to 5-7 years, during which time most investments are recouped.

To solve this problem, an adequate economic model is necessary. We will divide productive forces into three main categories: simple reproduction (SR) – the part that ensures the current level of well-being. The innovation block – fun-

damental and applied science, all those labor resources along with their material support – that ensure a shift in the static optimum – a shift in product quality, cost, and the range of consumer goods and services. This block generates profit (the scientific and technological progress block). And finally, the expanded reproduction (ER) block. Optimal proportions and clear incentives for these three blocks are precisely the condition for a dynamic optimum. In reality, expanded production is combined with innovation. However, the innovation block occupies an insignificant portion of society's material resources, but ultimately it is this block, that is, the rate of shift in the static optimum, that determines the rate of economic growth.

However, this doesn't negate the need for a balanced economic system. Under capitalism, the drive to increase profits and save labor proves excessive. Expanding production is riskier and less immediately apparent in terms of profit growth. As a result, unemployment is typical of capitalism. The solution to this problem often falls to the state. Private capital faces different challenges. In our economy, innovation is hampered by the dark spots of socialism and lags behind certain limits. Our capital, perhaps due to weak competition, is not an active customer of technological innovation, and the state is forced to lend a helping hand and stimulate innovation.

In an optimal economy, innovation is a matter of life and death for enterprises, or rather, the only way to survive in the fierce competition for consumption funds. Scientific and technological progress and innovation are entirely at the corporate, industry level. Enterprises are relatively price-neutral, and product competition is virtually nonexistent. This facilitates the organization of industry-specific research on a shared basis. Leading enterprises and industry institutes collectively help everyone implement new technologies. This is because the exit of a bankrupt enterprise from the market leads to higher prices and fines, and the remaining enterprises suffer losses, or at least receive no benefits.

One of the fundamental principles of the theory is that all effective measures must be implemented. The key concept here is efficiency. Most scientific developments do not pass rigorous market testing. The high growth rate of the primary economy cuts off the market for a significant portion of innovations. In the primary economy, there is an exchange of consumption funds for profits, and this is the main source of loans and investment capital for enterprises. The volume of government orders is also significant. Employees are willing to sacrifice current earnings for future income. But they are also unwilling to sacrifice current earnings unless it promises obvious long-term benefits, especially since they will have to implement all decisions themselves.

Production expansion is regulated by another crucial mechanism: the price of profit. The price of profit (capital) within the economy is determined by the efficiency of its use. If profit is high, the price can fall to very low levels. Accordingly,

the efficiency of production expansion varies widely. A permanent transition process occurs, converging toward equilibrium. Each enterprise optimizes its workforce based on the criterion of zero added value from an additional worker. Thus, industry expansion occurs through the creation of new production facilities, taking into account the scientific and production achievements of existing enterprises and industry-specific research. A new enterprise enables a leap in production and market victory for those who undertake it. Thus, balance in the economy as a whole is maintained automatically. However, the entire economy in the proposed model operates automatically and categorically rejects interference from the state and bureaucrats. The implementation of large investment projects, such as high-speed roads, is carried out by the state. For this, the State Planning Committee (Gosplan) is required.

Industry's active demand for innovation doesn't fully embrace fundamental science and education. Therefore, government regulation is necessary in this area as well.

In conclusion:

1. The system-forming factors of economic systems are integral criteria. Capitalism is profit, while an optimal economy (called "communism" in our classification) is the sum of price reductions. It also integrates cost, quality, and production volume, and in the correct proportions. Other criteria essentially do not exist, so other economies are essentially impossible (socialism was not a system).
2. All public sector employees receive salaries and pensions as prescribed by law. Each year, the purchasing power of their earnings increases by the deflation rate. The state has no need to monitor or adjust their incomes. However, some redistribution is necessary. Life changes, and some social strata and professions require additional support. In the commercial sector of the economy, the purchasing power of the ruble also increases annually.
3. The total wage fund is determined by the team's performance—added value, i.e., labor productivity (price reductions on the market generally have little impact on the company). Within the team, the consumption fund is distributed based on employee ratings. The rating determination procedure is not discussed in this article. It's enough to note that an unfair rating will prevent the company from operating. Naturally, ratings are periodically reviewed. This requires continuous learning.
4. The increase in capitalization is distributed among the team in proportion to the salary for the corresponding period.
5. The OE does not presuppose the elimination of deviant behavior from society. Large bribes from wages are not accepted, except perhaps for very small amounts, such as gifts. A slight decrease in crime can be predicted.

6. The commercial part of the economy operates automatically and categorically rejects government and bureaucratic intervention, as it derails the economy and reduces growth rates. «Monopoly» is a concept that no longer exists.
7. Officials, ministries, tax officials, accountants, the banking sector, and political parties are being reduced by an order of magnitude. Several million of the most highly educated workers are left without jobs and will have to shift to production. An oligarch or capitalist, if they are a talented manager and professional, will find their place. A third-generation bandit or a boor is unlikely to do so. Capitalization as accumulated surplus value cannot be considered a divine blessing.
8. The state still faces challenges, as it acts as the main customer in the social sphere, the judicial system, large infrastructure projects, ecology, education, fundamental science, the labor market, issues of external and internal security, geopolitics, foreign trade, election organization, and medicine.
9. Each employee is responsible for the results and determines the efficiency of the enterprise, and accordingly, their earnings.
10. Investment issues are resolved at the corporate or industry level, not by vote, but by an academic council. Large investments are submitted for collective approval, as they could reduce current earnings when borrowing for consumption funds.
11. Enterprise size is limited by the optimal division of labor—the negative marginal utility of the worker. Large enterprises will be forced to create autonomous teams and organize them into a federated structure.
12. The presence of the theory of dynamic optimum and powerful incentives for its implementation guarantees the maximum rate of growth of social welfare.
13. The growth rate is quasi-stationary in nature with inevitable transition processes.
14. Capital, profits, and loans can fluctuate greatly in price. This is due to fluctuations in the marginal utility of investments in expanding production, and this mechanism guarantees full employment.
15. Non-market products and services are paid for on a contractual basis.
16. Industries and businesses with inherently low investment potential, such as the food service industry, are leveling wages by increasing profitability. Some businesses may operate in a gray zone, not claiming to receive payments based on price reductions.
17. An optimal economy resets the thesaurus of economic science. It's hard to predict what will need to be pulled out of the trash bin next.

It's clear that under communism, "to each according to his need" or a man for every woman is a joke. Serious matters can't be undertaken with a grim grin. But it's also clear that summing up a bright future in a formula is unrealistic. Take the Ten Commandments, for example: do not kill, do not steal, do not bear false witness, do not make idols, honor your father and mother... These moral guidelines are correct, but ultimately, as history shows, unattainable. The level of their implementation depends on a dozen factors, including the quality of the laws, the inevitability of punishment, and the work of law enforcement. Catching and isolating all the scoundrels is the right goal, nothing more.

Allowing those who are willing to work, motivating the lazy (motivating, not forcing), giving everyone the opportunity to fully realize their creative potential and receive their due—this is closer to communism, the realities of an optimal economy. Agreeing on a mathematical model of the economy and implementing it is also a completely achievable goal.

Always rely on humanistic principles, not violence, and resist injustice. Make life free, dignified, and happy….

The author concludes that communism is an unattainable ideal, which society approaches asymptotically. Having resolved current problems, society will face new challenges.

One thing is clear: by eliminating the abominations of capitalism and making all leadership elected, from the president to the lowest foreman, society will make a significant leap in its social and economic development. Moreover, this is a very simple and humane operation. And Russia will gain a weapon more powerful than the nuclear triad, in the form of a rate of prosperity unattainable by other countries.

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尽职调查：对投资者实施必要性的总体理解
DUE DILIGENCE: GENERAL UNDERSTANDING THE NEED FOR IMPLEMENTATION IN RELATION TO INVESTOR

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摘要：如今，对投资者进行经济和法律尽职调查已不常见，而且徒劳无功，因为投资和投资者本身往往非但没有带来积极影响，反而给企业带来了混乱和破坏。

关键词：尽职调查、投资者、所有者、财务状况、财务稳定性、投资者评估、投资吸引力。

Abstract. *Today, it is not customary to conduct economic and legal due diligence on an investor, which is in vain, since there are frequent cases when investments and the investor themselves, instead of a positive effect, bring chaos and destruction to the business.*

Keywords: *due diligence, investor, owner, financial position, financial stability, investor assessment, investment attractiveness.*

The role of investment in the economy is difficult to overestimate: thanks to them, a company can enter new markets, develop new products, acquire a new production line or technology, or a product recipe, improve the company's IT structure, move out of rented space and purchase its own, ultimately creating an investment property and reducing rental costs, etc. Investments allow a company to gain momentum and competitive advantage by using additional non-owned resources, not always material or financial. The importance of investment for business is well known, and our goal is not to rehash well-known principles.

However, despite the importance of investment, the search for which sometimes becomes an obsession and goal, few business owners evaluate whether a legal entity truly needs investment, much less whether it needs investment from this particular investor and under these specific conditions.

Cases of successful investment attraction are described in scientific and practical literature, as well as in online sources, but negative cases are rarely discussed or written about. For example, the Kazakhstani investment community UNIMO acknowledges that "attracted investment can not only save a business, but also destroy it" [1]. The UNIMO team highlights the following negative aspects [1]:

- the investor begins to interfere with every decision: from the color of the logo to the hiring of employees, which results in team paralysis and loss of focus;

- demands super profits immediately: expectations of "100% per annum in 3 months" push businesses towards risky actions, unsustainable schemes and burnout;

- does not delve into the business model: "The main thing is that they pay dividends," this approach leads to blind investing, and then to lawsuits and grievances;

- plays micromanagement: instead of strategic support - constant calls, reports, "give me the spreadsheet urgently", the entrepreneur works for the investor, and not for growth;

- leaves without dialogue when things become "uncomfortable": any business faces difficulties, but instead of partnership, the investor disappears or presses for a refund, exacerbating the crisis.

The "BUSINESS SECRETS" project from JSC TBank also discusses unprofessional investor behavior, which can lead to adverse consequences for a business: "There's the concept of a 'wild investor'—an investor who wants to control a business. They interfere with work processes, impose their decisions and their own business practices, and manipulate the fact that they gave the entrepreneur money. This can destroy team processes and even the business itself" [2].

As we can see from the list above, working with such an investor is definitely, to put it mildly, uncomfortable. Such collaboration drains the company's resources to meet the investor's needs: funding the immediate payment of their share of profits, repeatedly proving and defending already agreed-upon development plans, wasting time on unnecessary reports for the sake of reports or meetings for the sake of meetings, defending the owner's or director's role in operations, preventing personnel changes or introducing unnecessary new team members into the organization's structure, prohibiting interference in the company's sales and pricing policies, analyzing and clarifying whether new suppliers of goods or contractors for completed work or services rendered are affiliated or interdependent with the investor, urgently seeking funds for a preemptive buyout of the investor's stake when, at the first sign of conflict, the investor decides to exit the business and sell the stake to competitors, and many other negative steps and actions on the part of the investor that only aggravate the situation and waste potential synergies.

Therefore, not every investor is capable of bringing additional resources and synergies to an organization without deteriorating the company's financial position or leading the business to liquidation or bankruptcy. Therefore, although investor due diligence is not a mandatory or frequently used procedure, in our opinion, it is essential to adhere to the general rules of due diligence. While due diligence essentially involves a review, analysis, and assessment of the reliability of a business entity, it is generally applied only to the investment target—a legal entity—and primarily in M&A transactions.

In our opinion, the lack of due diligence for investors in common practice leads to a lack of equality of parties in the investment process, making it impossible to objectively assess the investor and their impact on the investment object—the business. Cases are not uncommon, but are not usually discussed publicly or publicly, where an investor has brought only negative consequences to a business without any additional positive financial results from attracting investment, and sometimes even withdrawn resources from the business.

Since due diligence is currently understood as a comprehensive review by the buyer of an investment target (a legal entity), which involves verifying financial and legal data, as well as corporate values and business culture. This review is intended to ensure the absence of unexpected liabilities for the investment target after the transaction is completed and that the business is suitable for investment from the investor's perspective. Therefore, from this perspective, the investor must also be assessed from the perspective of the investee [3]. Of course, it is also necessary to consider whether the investee has the choice and the time to wait for an investor who fully satisfies the investee's investment criteria at the stage of its life cycle.

The international Dutch investment and consulting company Dealroom [4] gives advice to buyers (investors) intending to carry out M&A transactions – it is necessary to know the answers to several important questions [5]:

- why the company is being acquired;
- what will be the effect of acquiring the company;
-what are the current market conditions of the industry;
- what is the financial position of the investor company;
- What are the financial forecasts of the investor company?

Thus, we see a prudent investor approach to the investment process, which includes assessing the company's current and future financial performance and evaluating the investment climate (analyzing current market conditions). The investor must understand the purpose of the investment and the desired impact. It's worth noting that this is not limited to profitability and investment efficiency.

Therefore, in our opinion, the owner of the investment object, if it is a legal entity, should also answer similar questions:

- why the company needs investments: to replenish working capital, to develop new markets or for other purposes;

In our opinion, it's also important to compare the potential investor's investment fee with interest on loans, interest on microfinance institutions, or bond yield. These payments may be more profitable for the investee than, for example, a direct investor acquisition.

- what will be the effect of the investment;

Here, in our opinion, it is necessary to understand the cumulative tangible and intangible impact of both the investor's activities in the company, if they have the right to make decisions or control the investee, and the impact of the investment itself: whether a new production line was purchased and successfully launched, or whether the funds were used to pay for the organization's current needs and disappeared into the organization's bank statement.

- what are the current market conditions of the industry;

Can investments breathe life into the company, or is all lost and should it record a loss? Have the operating conditions that previously enabled the company to make money changed? For example, some Belarusian companies, following the introduction of price controls on consumer goods, experienced negative financial performance in online retail and a general decline in economic efficiency [6].

- what is the financial position of the investor company;

This question is important to understand whether the investor can contribute not only financial and material resources, but also knowledge, experience, connections, and other resources, as well as whether the investor will be able to fulfill their obligations to provide funds within the required timeframes in accordance with the investment agreement. Otherwise, if the investor fails to fulfill their obligations, this will have an extremely negative impact on the business operations of the investee, which will be forced to either close the investment or seek another, additional investor, which would constitute a form of force majeure and unforeseen circumstances. But perhaps these could have been foreseen with a timely assessment of the investor's company's financial position?

- What are the financial forecasts of the investor company?

Here, it's important to obtain information about the investor's potential plans for the future of their company, which will be the financial donor of the investment. Perhaps the company's business development plan includes certain measures that will prevent it from fulfilling its obligations in the future, and the investor will seek additional sources of financing, which will negatively impact the original investment project and the overall operations of the investee.

Of course, potential investors aren't accustomed to being assessed by themselves rather than by themselves, which can cause some dissatisfaction and confusion, as such widespread investor due diligence practices don't exist in global investment activities. However, an investor shouldn't just blindly desire investment; they should also assess the extent to which they need it, understand its purpose, and consider their financial and business security and sustainability.

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印度和东盟作为全球能源发展的驱动力。期待核能复兴
THE DEVELOPMENT OF INDIA AND ASEAN AS DRIVERS OF GLOBAL ENERGY DEVELOPMENT. AWAITING A NUCLEAR RENAISSANCE

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In the 21st century, energy not only addresses the challenges of raising citizens' living standards and accelerating the quantity and quality of goods and benefits they receive, but also fosters a heightened national consciousness and prioritizes the sovereign existence of each state beyond any theoretically considered historical ties with the outside world. This means that energy is responsible for the ability to feed oneself and provide everything necessary, to keep one warm, and to provide a reason to smile at any problems besetting modern people. For, as the great artist and circus clown Yuri Nikulin once said, "a smile kills at least one microbe somewhere in the body."

Therefore, developing an effective international energy strategy, the need for which is recognized in the National Energy Policy adopted by the Government of India in 2017 (hereinafter referred to as the NEP), is key to meeting domestic energy demand amid growing dependence on imports. The Indian leadership's policy should not only ensure a guaranteed supply of fuel and energy resources (FER) but also ensure access to foreign technologies, expand onshore energy supplies, and expand India's participation in foreign energy organizations and their projects as an equal partner.

India's international energy strategy should be aimed at reducing import dependence and diversifying its energy supply. India has significant potential for building strong energy cooperation with its neighbors. According to the NEP, diversified and secure oil and natural gas supplies can be achieved through projects

in Central and East Asia. However, the implementation of projects with Central Asian countries, including the Iran-Pakistan-India and Turkmenistan-Afghanistan-Pakistan-India gas pipelines, is complicated by the US-Iran crisis, the Taliban's rise to power in the Islamic Emirate of Afghanistan, and the unresolved Indo-Pakistan conflict. Developing multilateral cooperation with the countries of the Association of Southeast Asian Nations (ASEAN) offers a promising direction given their geographic location, established ties between them, and active trade (ASEAN countries account for approximately 10% of India's exports).

India's interaction with ASEAN countries is carried out in accordance with the India-ASEAN Framework Agreement on Comprehensive Economic Cooperation, concluded between the parties on 8 October 2003 (hereinafter referred to as the Framework Agreement). Within the framework of this agreement, the Agreement on Trade in Goods (13 August 2009), the Agreement on Dispute Settlement Mechanism (13 August 2009), the Agreement on Investment (12 November 2014), and the Agreement on Trade in Services (13 November 2014) were reached, aimed at removing external trade barriers, liberalizing trade, and strengthening comprehensive cooperation. In accordance with the Framework Agreement, schedules for the elimination of customs duties between the parties to the agreement until 2020 were provided, but despite the fact that significant easing of customs barriers was achieved, it was not possible to achieve a complete elimination of tariff measures.

The Regional Comprehensive Economic Partnership Agreement (hereinafter referred to as the RCEP Agreement) was intended to be a conceptual continuation and expansion of the Framework Agreement. It established new deadlines for the elimination of tariff barriers, introduced the requirement for the stated waiver of non-tariff measures, and covered new areas such as investment, industrial cooperation, customs cooperation, and national market protection measures. The main goals of India's participation in the RCEP Agreement were to increase its presence in Southeast Asian markets and strengthen relations with ASEAN countries for the meaningful and comprehensive use of their industrial potential, including through participation in energy projects. However, India withdrew from the RCEP negotiations in early 2019.

China's participation in the RCEP agreement could have created a number of economic risks for India due to a potential sharp increase in imports of cheaper and more competitive goods from China. Trade liberalization with all members of the bloc could have widened the trade deficit and reduced the competitiveness of some of India's most vulnerable sectors, such as automotive, light industry, and, especially, agriculture. India's accession to the RCEP agreement could have facilitated the development of India's fuel and energy sector and secured access to resources from ASEAN countries, at the expense of developing other sectors of the Indian economy.

On 25 January 2018, India and ASEAN held a Summit to commemorate the 25th anniversary of their relations, under the theme "Shared Values, Shared Destiny" [1], which resulted in the signing of the Delhi Declaration. In the Delhi Declaration, the parties reaffirmed their intention to further deepen bilateral relations and clarified the key areas of cooperation, including the energy sector. They agreed on the need to strengthen cooperation between the countries' fuel and energy sectors to ensure energy security in the region. The parties noted their satisfaction with the progress in implementing the Plan of Action for the Implementation of the ASEAN-India Partnership for Peace, Progress and Shared Prosperity (2016-2020) (hereinafter referred to as the 2016-2020 Action Plan).

The Action Plan 2016-2020 defines the goals of joint development in the fields of politics, economics, and culture. In the energy sector, the parties are tasked with promoting the ASEAN-India Initiative on New and Renewable Energy, strengthening energy cooperation, ensuring energy security in the region and minimizing the negative impact on the environment, promoting investment in the fuel and energy sector, including oil and gas projects and infrastructure, supporting rural electrification programs and ensuring institutional interaction, as well as implementing the ASEAN Action Plan on Energy Cooperation 2016-2025; in the field of natural resource management and extraction, the parties are tasked with developing human capital to meet growing needs in this area, and ensuring research and development (hereinafter referred to as R&D).

In continuation of the implementation of the state policy within the framework of the Action Plan 2016-2020, the Action Plan for the Implementation of the ASEAN-India Partnership for Peace, Progress and Shared Prosperity (2021-2025) (hereinafter referred to as the Action Plan 2021-2025) was adopted, which defines tasks in the energy sector similar to the previous action plan.

The implementation of the ASEAN Plan of Action on Energy Cooperation 2016-2025, adopted in 2015, is one of the main objectives of the Action Plan 2016-2020 and the Action Plan 2021-2025. Within the first phase (2016-2020) of the ASEAN Plan of Action on Energy Cooperation 2016-2025, ASEAN countries have been set 7 key goals corresponding to 7 programs: the introduction of a multilateral electricity trading system, ensuring the connectivity and availability of the bloc's energy systems through the construction of a gas pipeline system, enhancing the image of coal through clean coal technologies, reducing the energy intensity of countries, increasing the share of renewable energy sources (hereinafter referred to as RES) (from 7% to 12%, according to global statistics on "green transformations") in the fuel and energy balances (hereinafter referred to as FEB) of ASEAN countries, developing energy policy and creating technological and regulatory foundation for the further development of the nuclear industry.

The second phase (2021–2025) of the ASEAN Plan of Action on Energy Cooperation 2016–2025 sets the following objectives: expanding regional multilateral electricity trade, strengthening the reliability of the bloc's power systems and modernizing infrastructure, promoting renewable energy; ensuring the development of a single natural gas market; ensuring the use of clean coal technologies as a way to achieve sustainable development with low greenhouse gas emissions; further reducing the energy intensity of ASEAN countries; increasing the share of renewable energy generation; strengthening energy policy and planning in the fuel and energy sector; developing human resources to support R&D in the nuclear industry.

Based on the results of the first phase of the ASEAN Action Plan on Energy Cooperation 2016-2025, as of the end of 2020, the mechanism for trading electricity between the Lao People's Democratic Republic, the Kingdom of Thailand, the Federation of Malaysia and the Republic of Singapore was launched for the first time, 13 domestic gas pipelines with a total length of more than 3.5 kilometers and 9 liquefied natural gas (hereinafter referred to as LNG) regasification terminals were built in the territory of 6 ASEAN countries, more than 10 GW of capacity of supercritical and ultra-supercritical coal-fired power plants were installed (as of the end of 2019), and a reduction in the energy intensity of ASEAN countries by 21% from the 2005 level was achieved [2].

India's participation in ASEAN regional agreements ensures the synergistic development of the countries' economies as a whole and, in particular, their fuel and energy complexes. India's partnership in the implementation of the ASEAN Plan of Action on Energy Cooperation 2016-2025 and other regional initiatives not only provides India with profits from participation in ASEAN fuel and energy projects and expanded opportunities for purchasing fuel and energy resources, but also subsequently creates the possibility of unifying energy systems, which, due to differences in energy consumption levels, the scale of economies and the time of peak loads of energy systems, can ensure guaranteed energy supply during a shortage of active capacity and increase the level of energy security through the import of electricity, as well as the construction of a gas pipeline through the Republic of the Union of Myanmar to India, and the inclusion of India in the electricity trading mechanism, in particular through the conclusion of contracts for the supply of renewable energy capacity. [3]

The participation of Indian companies as an alternative to Chinese ones on various continents in various construction and energy projects enriches global energy practices, does not contribute to the monopolization of prices for standard services and, according to UN forecasts, by 2030 will make India the world leader in terms of GDP and the speed of synergy of multiplier effects in the country itself and in the Asia-Pacific region, which is already today the most energy-overloaded and at the same time has a clear tendency towards energy shortages. [4]

These trends reflect the ongoing dicapitulation of the US and China, and the transfer of energy and "dirty" production within the framework of the "green agenda" from the countries of the "golden billion" to distant empirics, and the deindustrialization of the Old World at the final stage of the Marshall Plan for the final enslavement of Europe in its excessive desire to remain the center of innovation and compete with the Anglo-Saxons in all types of scientific and technological activity. [5]

Therefore, the nuclear energy renaissance, where Russia holds a key role in the safe uranium cycle, could become a proven example of leadership in both APEC and BRICS, and especially become the mainstream of the "green agenda," which awaits new high-tech solutions and innovations, as Rosatom State Corporation has already demonstrated in many countries. Despite sanctions, we must integrate our Russian science into the international peaceful nuclear agenda and not lose the well-deserved leadership of Soviet nuclear scientists and those who understand the immense shortfalls of the digital age of AI and Big Data for the scientific and technological revolution, a trajectory with our participation and dominance.

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俄罗斯完善环境管理合同机制的若干问题
SOME PROBLEMS OF IMPROVING THE CONTRACTUAL MECHANISM OF ENVIRONMENTAL MANAGEMENT IN RUSSIA

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摘要：有效合理地利用自然资源、实现经济目标以及恢复适宜的条件和人类栖息地，很大程度上取决于规范这些关系的法律框架的完善。鉴于特定类型自然资源和设施使用合同结构的法律规制碎片化，以及该领域实际关系的不断发展和复杂性，我们认为有必要采取全面统一的方法。

关键词：合同、协议、环境管理、自然资源利用、环境保护。

Abstract. *The ability to effectively and rationally use natural resources, achieve economic goals, and restore favorable conditions and human habitats is largely dependent on the perfection of the legal framework governing these relationships. Due to the fragmented legal regulation of contractual structures that mediate the use of specific types of natural resources and facilities, as well as the constant development and complexity of actual relations in this area, we believe that a comprehensive and uniform approach is necessary.*

Keywords: *contract, agreement, environmental management, use of natural resources, and environmental protection.*

Research into current environmental issues, the global climate change crisis, and the implementation of strategic initiatives to incorporate sustainable development principles are impossible without the existing Russian framework for environmental and legal regulation of natural resource management. It is widely recognized that achieving the goals of maintaining favorable living conditions, industrial development, and environmental well-being are interdependent and interdependent. Today, the global community is uniting to create a new approach to business development that transcends the dogma of profit at any cost and aligns itself with society, sharing and creating common values in the interests of people

and nature, humanity and the planet. Numerous international treaties, concepts, principles, and other bilateral and multilateral instruments are being implemented to address environmental issues. As a full and active participant in the international environmental arena, the Russian Federation fully embraces and implements the most advanced approaches to the development of domestic natural resource legislation and the introduction of best environmental practices.

For centuries, humans have been actively exploiting natural resources, developing economic activity, and altering the environment. This leads to the pollution of soil, air, and water bodies, and the depletion of forests and other natural resources. Throughout its existence, humanity has been actively exploiting natural resources, inevitably altering the environment. Certain components of nature are currently significantly depleted, while others are so polluted that without restorative intervention and a change in global approaches to environmental management, the likelihood of local and global environmental and climate disasters is real.

Despite the global nature of these problems, humanity is making a positive contribution to preserving the Earth's natural environment. In recent decades, many countries have taken measures to protect the environment.

Modern technologies help reduce pollution, recycle waste, and purify water. Global programs such as forest conservation and plastic reduction are aimed at improving the environment. If people continue to implement environmentally friendly technologies and use resources sustainably, the planet can recover.

Environmental organizations such as Greenpeace and WWF play a vital role in environmental protection. They work to restore the environment, control emissions, and preserve wildlife. Many countries are introducing laws to reduce the impact of economic activity.

Object of study. In the context of the topic under study, it is appropriate to examine the contractual mechanism in relation to natural resource use both in Russia and internationally. In international law, a contractual approach to regulating natural resource and environmental protection relations is widely used, due to the synergistic effect of environmental issues.

Treaties are considered the most universal and effective means of international cooperation in the area of rational nature management and environmental protection. Agreements were often developed and concluded in response to disasters or reactive environmental degradation, with the aim of localizing negative consequences and eliminating the damage. Due to the application of this practice, by the 20th century, international law had accumulated a significant body of agreements, bilateral and multilateral treaties in the area of nature management and environmental protection [1, p. 34]. The Convention on the Law of Treaties, adopted in Vienna on May 23, 1969, is generally considered the fundamental source of international treaty law [3].

The specific nature of international environmental treaties stems from the fact that their content typically incorporates the principles and most conceptual approaches of the participating states to regulating a specific area of legal relations in their domestic legislation. Such agreements lay the foundation for regional cooperation aimed at ensuring the conservation of natural resources and the rational use of natural resources.

The terms of international treaties are legally binding on countries that have formally ratified them. Some of the most well-known, for example, Kyoto Protocol, distinguish between types of countries and the respective obligations of each under the agreement. To date, several hundred have been concluded international, but most of them only bind the most developed countries by their terms. Despite this, they play an important role in international environmental conservation. A list of current multilateral treaties, conventions, and agreements implemented by Russia is available on the official website of the Ministry of Natural Resources and Environment of the Russian Federation [8].

It should be noted that, in accordance with paragraph 1 of Article 82 of the Federal Law "On Environmental Protection" [11] (hereinafter referred to as the Law on Environmental Protection), international treaties of the Russian Federation in the field of environmental protection, which do not require the issuance of domestic acts for application, are applied directly to relations arising in the implementation of activities in the field of environmental protection. In fact, this provision indicates that concluded and ratified international treaties are part of the legal system of Russia, and in the absence of domestic legislative acts developing their provisions, they are valid on the territory of our state in the context in which they are formulated. It can be noted that the application of the provisions of international treaties as regulators of nature management relations on the territory of the Russian Federation is due to the fact that to date our state has actively cooperated with other countries on environmental protection issues (Article 81 of the Law on Environmental Protection). We recognize that the problems of the global environment and climate, despite the geopolitical situation, require global cooperation and coordinated actions of the entire world community.

The most relevant agreement in the field of international environmental protection is the UN Global Compact, initiated in 2000 by former UN Secretary-General Kofi Annan. This agreement is considered by contemporaries to be an effective international instrument for engaging business in the formation and promotion of sustainable development concepts [4].

Based on the provisions of the Global Compact, a new, environmentally-oriented approach to economic and entrepreneurial activity is being developed, focused on ensuring the interests of humanity, nature, and the preservation of the planet's biodiversity. Based on the concept of the Global Compact, the feasibility,

feasibility, and viability of any type of economic activity are primarily assessed based on criteria of economic, environmental, social, and ethical viability. The incorporation of the core principles of the Global Compact into economic, industrial, and business strategies, and public confirmation of commitment to the UN Global Compact, are recognized indicators of responsible corporate practices and a sound business reputation, as well as important elements of long-term business sustainability.

The question of the admissibility and appropriateness of applying the civil law structure of a contract to relations arising in connection with the use of natural objects and resources for Russian science seems to be permanently debatable. There are scientific positions according to which the application of civil law structures of agreements is impossible and should not be applicable to relations of use of natural components [10, p. 124]. A number of researchers allow the application of the institution of a civil law contract in the case of the use of a natural object converted into private property [2, p. 42]. Of interest are the ideas about the existence of so-called administrative law contracts that exclude the civil law nature of legal relations that have natural objects as their subject matter [12, p. 57]. Only during the period of rapid development of market economic mechanisms, the question of the need to involve natural resources in economic circulation entailed a shift in the paradigm of an exclusively administrative approach to the use of natural objects and resources towards a civil law mechanism that provides for not only the recognition of individual components of nature as objects of not only property, but also obligatory legal relations. Strictly speaking, the urgent need to create a legal basis for the newly emerging economic system allowed for the adoption of certain civil law institutions for the needs of environmental law. Without delving into further controversy, we note that, in accordance with the provisions of current environmental legislation, civil law applies to relations regarding natural resources formalized in contractual structures [6, p. 148]. The established scientific opinion is that “a contract is an independent and important element of the system of mechanisms for legal regulation of relations regarding environmental management” [9, p. 8].

The general theoretical concept of a natural resource management agreement appears to us to be a category requiring definition, if not at the legislative level, then at the scientific level. As we have previously established, a purely civil law or purely administrative approach to natural resource management agreements cannot be applied due to the specific nature of their subject matter, content, and the procedures for their conclusion and execution.

Current practices for natural resource use, as well as modern environmental and climatic conditions, indicate the primacy of environmental protection in any exploitation of natural resources, including contractual ones. At the same time,

the balance between economic indicators of environmental management and the requirements for the conservation, restoration, and protection of nature is usually shifted in favor of the latter [9, p. 9].

Clearly, a special paradigm for this legal institution needs to be developed. At the same time, the legal institution of contract undoubtedly has a civil-law nature, and therefore, the legal definition of the concept formulated in paragraph 1 of Article 420 of the Civil Code of the Russian Federation (hereinafter referred to as the Civil Code of the Russian Federation) [5]]. In this regard, we believe it is necessary to clarify the meaning of the term "nature management" based on the concept of "use of natural resources" formulated in paragraph 16 of Article 1 of the Law on Environmental Protection. Among other things, we believe it is necessary to include in the concept a focus on ensuring the rational contractual use of natural resources. We propose to consider this use of natural resources as the use in which the user, at his own expense, implements a set of measures "... to improve the quality of natural components, its individual components ..." [7, p. 18]]. Thus, taking into account the specifics of the sphere of legal regulation, the purpose and objectives of the obligation to use a natural resource (or object), we believe that the definition of the concept of an agreement in the field of nature management can be formulated as follows: an agreement on nature management is a synergistic public-private agreement concluded for the purpose of the emergence, implementation and termination of the right to use a natural resource, carried out in the form of specific types of influence on it, permitted and agreed upon by the parties in the process of economic and (or) other activities, ensuring the reproduction and preservation of the natural environment.

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完善俄罗斯联邦民事诉讼领域立法的主要方向

MAIN DIRECTIONS FOR IMPROVING THE LEGISLATION OF THE RUSSIAN FEDERATION IN THE FIELD OF CIVIL PROCEDURE

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摘要：优化诉讼程序是一个永恒的课题。本文试图论证改进民事和仲裁案件司法程序形式的必要性。作者分析并评估了俄罗斯联邦最高法院为确保诉讼程序符合现有法律、经济、社会和其他条件而采取的措施的有效性。

关键词：诉讼程序、民事诉讼、仲裁程序、民事程序、仲裁程序、司法体系优化。

Abstract. *The problem of optimizing legal proceedings is a permanent issue. This article attempts to justify the need to improve the procedural form of administering justice in civil and arbitration cases. The authors analyze and evaluate the effectiveness of measures taken by the Supreme Court of the Russian Federation to ensure that legal proceedings are in line with existing legal, economic, social, and other conditions.*

Keywords: *Legal proceedings, civil proceedings, arbitration proceedings, civil process, arbitration process, and optimization of the judicial system.*

Throughout human history, the issue of creating a near-perfect judicial system that would ensure fair, honest, objective, and cost-effective justice has been a pressing one. As judicial practice has evolved, so too has the judicial process itself: from primitive to more humane and sophisticated. However, to date, no country in the world boasts an ideal judicial system. However, this does not mean that attempts to create the most effective and pragmatic judicial mechanism capable of simultaneously satisfying public and private interests should not be undertaken [4,

p. 16]. After all, the outcome of court proceedings, as well as the legality and fairness of final judicial decisions, directly depend on how optimized and convenient the judicial system is. Furthermore, in the reality of a legally governed social state, such as the Russian Federation, the restoration of violated human and civil rights must be carried out as quickly and effectively as possible [9, p. 187].

When faced with doubts about the effectiveness, legality, and social relevance of the judicial mechanism capable of ensuring fair judicial decisions, citizens sometimes turn to other methods to resolve problems and disputes. These methods are often not entirely legal and even dangerous for both the individual and society as a whole. From this perspective, accessible, effective, and expeditious legal proceedings can effectively reduce crime rates. Therefore, it seems necessary to determine the reasons for the ineffective and slow legal process in Russia [3, p. 118].

Like any phenomenon, justice and its quality are determined by a number of factors, among which the most influential are the prevailing social, economic, and political conditions. Since the collapse of the Soviet Union, the Russian Federation has been actively combating unemployment, which peaked in the 1990s and early 20th century. Current analytical data indicates a significant decline in the unemployment rate across Russia. In June 2023, it reached a historically low 3.1%, which is estimated to be the lowest level for the entire period of modern Russian statehood since 1992. This should certainly be considered a major achievement for our country. However, this state of affairs is causing a counterproductive situation, namely, an acute shortage of personnel, which is undoubtedly a negative phenomenon [10, p. 477]. Recruiting agencies, commercial job search websites, and the media report an acute shortage of skilled workers. It should be noted that the labor shortage in Russia, although temporary, reflects a general trend of labor shortages, manifesting with varying frequency in specific sectors and regions of the Russian Federation. In the current geopolitical environment, there is an objectively growing trend toward job openings, a reorientation of economic sectors, a shift in business development priorities, and a redistribution of resources, largely driven by the need to concentrate resources for special military operations.

The shortage of sufficient labor has affected both private companies and government agencies, including the Russian Federation's judicial bodies and the Federal Bailiff Service, which directly influences Russian legal proceedings and their outcomes. Under current conditions, court and Federal Bailiff Service employees are being tasked with performing even greater job responsibilities. Consequently, staff are forced to work beyond their normal working hours, which negatively impacts their effectiveness, as well as their mental and physical well-being. The psycho-emotional state of court employees and servants directly impacts the effectiveness of judicial proceedings, specifically the quality of court decisions, compliance with case review deadlines, and the drafting of reasoned decisions,

rulings, and other judicial acts. Streamlining the judicial process would not only promote justice but also eliminate violations of the rights and freedoms, as well as the legitimate interests of workers [11, p. 87].

However, a shortage of specialists not only hinders productivity growth but also creates competition among employers. Due to the personnel shortage, regions of Russia with more developed and stable economies and higher wages are luring personnel from regions that are economically inferior to more developed regions. This trend is observed not only in private enterprise but is also quite typical in public administration. Judges, court secretaries, judicial assistants, and other employees receive more lucrative offers from courts in other regions. In order to retain personnel, measures are being taken to improve working conditions, including increasing wages, which in turn can positively impact the entire judicial process. As is well known, high wages and other material rewards significantly increase labor efficiency and employee motivation [8, p. 347]. Thus, a labor shortage increases competition among employers, which contributes to improved working conditions for existing personnel and, undoubtedly, to the optimization of judicial proceedings.

Despite the need to optimize civil proceedings, it is worth noting that this must be carried out exclusively within the framework of the law and not exceed the legal framework. This means that cases must not be considered in violation of procedural deadlines; judges and other court staff must not exceed their official powers; and persons participating in a case must not use procedural rules to abuse their rights. Improving the efficiency and quality of legal proceedings and improving the system of exercising judicial power are the subject of constant attention by the state as a whole and the Supreme Court of the Russian Federation (hereinafter referred to as the Supreme Court of the Russian Federation) as the highest judicial body [2, p. 11]. Thus, on November 15, 2022, the Supreme Court of the Russian Federation adopted a number of resolutions concerning the application of procedural legislation by the courts. In one of the resolutions, the Supreme Court of the Russian Federation established a provision amending the requirement for a representative of a person participating in a case. Namely, for the performance of actions not related to the provision of qualified legal assistance to a person (receiving court notices, copies of court decisions, copying case materials), that is, actions of an organizational and technical nature, they are permitted to be performed by persons who do not have a higher legal education or an academic degree in a legal specialty [6].

Furthermore, in order to maximize the achievement of procedural efficiency, it is necessary to expand the scope of cases heard through simplified proceedings. Thus, cases involving disputes arising from the non-performance or improper performance of a contract, which are not particularly complex and can be heard using

written evidence, are fully consistent with the simplified procedural form. However, in 2024, of the 930,000 cases heard by arbitration courts, only 34% were heard through simplified proceedings. Thus, the example of this category of cases clearly demonstrates that the potential of simplified proceedings has not been fully realized. Therefore, further improvement of simplified proceedings will allow the redistribution of arbitration court resources to the most complex and comprehensive disputes, such as insolvency (bankruptcy) cases, corporate disputes, and challenges to legal acts [1]. Thus, the Supreme Court of the Russian Federation is considering the possibility of a legislative requirement to consider any case in simplified proceedings, with the exception of certain categories, not with the consent of both parties, as stipulated by the current version of the Arbitration Procedure Code of the Russian Federation, but rather upon the petition of one party and in the absence of an objection from the other party, or at the initiative of the court and in the absence of an objection from both parties. This will significantly reduce the costs of legal proceedings without compromising the quality of judicial protection of rights. The Supreme Court of the Russian Federation also indicated that, in order to optimize the simplified procedure in the context of this procedure, in the case of a reasoned decision, the operative part of the decision may not be prepared as a separate document [5].

Another important step toward improving judicial authority is increasing access to economic justice. The Supreme Court of the Russian Federation draws attention to the obligation of arbitration courts to suspend proceedings if a citizen, either the plaintiff or the defendant, participates in combat or military conflicts. Such a citizen has the right to petition for the case to be heard in their absence.

Another proposal by the Supreme Court of the Russian Federation aimed at improving access to justice and eliminating excessive formalism is to eliminate the procedural law requiring a copy of a legal entity's or sole proprietor's registration certificate to be attached to a statement of claim. This is because the information in the aforementioned copies of documents is already contained in other documents submitted.

The Supreme Court of the Russian Federation noted that the current organization of the arbitration court system ensures equal access to courts of the same level for all parties to a case. This is facilitated by the e-justice system, which allows participants not only to submit documents to the court and review case materials, but also to directly participate in the trial. Furthermore, to facilitate access by parties to the case to copies of the minutes or audio recordings of the court hearing, it is proposed that these data may be produced, including in electronic form. In order to reduce the time required for consideration of cases, the Supreme Court of the Russian Federation proposes that the indexation of awarded monetary awards be considered by the arbitration court without holding a court hearing and without

notifying the parties to the case, and that applications for reimbursement of legal costs be considered exclusively within the framework and according to the rules of simplified legal proceedings [7].

The Supreme Court of the Russian Federation believes that the institution of free, unlimited contractual jurisdiction, as currently enshrined in law, creates an unjustified burden on the courts of major Russian cities. This situation arises because the parties choose the most "convenient" judicial bodies. When establishing territorial jurisdiction in a contract, the parties consider the quality of proceedings in a particular court, as well as the prevailing practice in specific categories of cases. Therefore, the parties often choose the courts of major cities, which increases their workload. Therefore, it is proposed to retain the possibility of contractual jurisdiction only for disputes involving foreign parties.

The dynamic development of economic relations regulated by civil law entails the increasing complexity of the nature and essence of most categories of economic disputes, which, in turn, leads to increased time spent on their consideration. This explains the increase in the time required for case consideration in first-instance arbitration courts from three to six months, as stipulated by Federal Law No. 451-FZ of November 28, 2018. This timeframe has the potential to significantly improve the efficiency and quality of justice. However, other timeframes for complex cases remain unchanged. Therefore, the Supreme Court of the Russian Federation proposes extending procedural timeframes for adjourning court proceedings, considering appeals and cassation complaints, and other procedural actions. The Court notes that the increase in these procedural timeframes will not lead to an increase in the time required for consideration of these cases, as it only affects those considered under the standard procedure. Cases considered under the simplified procedure will continue to be considered as quickly as possible.

Thus, the Supreme Court of the Russian Federation develops innovations in procedural legislation during its plenary sessions, which contribute to the optimization of civil and arbitration proceedings. Furthermore, an annual meeting of judges is held with the participation of the President of Russia. Participants at this meeting summarize the performance of the Russian judicial system over the past year and develop a strategy for the development of the courts for the following year. Thus, at the 2024 meeting of judges, the President of the Russian Federation emphasized that "the effectiveness of the Russian judicial system depends on the deep knowledge, competence, and high professionalism of all those involved in legal proceedings." The Chairman of the Supreme Court of the Russian Federation noted that courts of general jurisdiction and arbitration courts continued to administer justice at a high professional level. Moreover, maintaining the quality of justice occurs against a backdrop of a growing number of cases. Thus, in 2023, courts considered approximately 39 million cases, and in 2024, more than

42 million. Stability and uniformity of judicial decisions are ensured by annually adopted regulatory legal acts. The meeting also discussed the issue of reducing professional workloads by introducing out-of-court dispute resolution procedures [1]. The Chairman of the Judicial Collegium of the Supreme Court of the Russian Federation for Economic Cases noted that the courts' workload for a number of case categories has increased. Thus, in 2024, arbitration courts received over 2 million different applications, of which 1.8 million were considered, with one in five of these cases being insolvency (bankruptcy) cases.

We believe that optimizing civil proceedings is an ongoing process. It is necessary both to improve the efficiency of courts and to ensure a fair justice system, as well as to protect the rights, freedoms, and legitimate interests of not only citizens but also judicial officers and employees. Creating an ideal judicial system is impossible, as diverse and complex social relations change, and consequently, judicial practice evolves. However, we must strive for an ideal mechanism that ensures prompt, pragmatic, fair, and cost-effective justice.

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利用人工智能创造知识产权客体的法律问题
LEGAL ASPECTS OF USING ARTIFICIAL INTELLIGENCE FOR THE CREATION OF INTELLECTUAL PROPERTY OBJECTS

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注释：数字技术，尤其是生成式人工智能算法的快速发展和应用，伴随着新的知识产权的出现。这需要考虑对此类技术的法律规制以及对知识产权的适当保护。本文分析了在知识产权创造和使用过程中与人工智能技术使用相关的法律规制。特别关注在使用作者的作品作为生成系统训练输入时尊重作者的权利。对知识产权保护立法的分析发现了这一过程规制中的漏洞，并证实了在数字技术发展背景下建立专门的法律机制以确保对原创作品版权持有人的利益进行适当保护的必要性。基于此，本文得出结论：如果不能确保对用于创作人工智能活动的原始资料的权利进行充分保护，就不可能将人工智能活动的成果认定为知识产权客体。

关键词：人工智能、知识产权、版权持有人、先进技术、人工智能技术培训。

Annotation. *The rapid development and implementation of digital technologies, particularly generative artificial intelligence algorithms, is accompanied by the emergence of new intellectual property rights. This requires consideration of the legal regulation of such technologies and the proper protection of intellectual property rights. This article analyzes the legal regulation of relations related to the use of artificial intelligence technologies in the creation and use of intellectual property rights. Particular attention is paid to respecting the rights of authors when using their works as input for training generative systems. An analysis of intellectual property protection legislation identifies gaps in the regulation of this process and substantiates the need to develop special legal mechanisms to ensure the proper protection of the interests of copyright holders of original works in the context of developing digital technologies. Based on this, it is concluded that recognition of the results of artificial intelligence activities as objects of intellectual property is impossible without ensuring full protection of the rights to the source materials used to create them.*

Keywords: *Artificial intelligence, intellectual property, copyright holders, advanced technologies, artificial intelligence technology training.*

The dynamic development of artificial intelligence technologies has led to the emergence of works and results of intellectual activity created using it, which in turn gives rise to new issues related to establishing the scope of rights to such objects and ensuring their proper legal protection. Current legislation, based on the classical concept of creativity, presupposes mandatory human participation in the process of creating a work, while advanced technologies are transforming the very understanding of the creative act.

Proper regulation of relations arising from the creation and use of artificial intelligence technologies should be considered as an interdisciplinary task, the solution of which depends on the nature of specific legal relations, while the formation of general legal regimes for the use of such technologies is associated with ensuring public interests and protecting the rights of citizens.

Issues related to the legal regime of objects created using artificial intelligence most affect the area of intellectual property.

Legal mechanisms developed in the 19th and 20th centuries, focused primarily on the results of individual human creativity, were not designed for a situation in which the creation of intellectual property becomes possible with the direct participation of autonomous digital systems. This transformation places human authors in a unique competition with technology capable of independently generating texts, images, and other intellectual property, raising new questions that require scientific understanding and legislative regulation [1]. This circumstance explains the growing interest of Russian legal doctrine in the application of advanced technologies.

Most modern legal research focuses on issues related to the development of a legal regime for protecting results created using generative algorithms of artificial intelligence. Defining the criteria by which such results can be recognized as objects of intellectual property rights is of fundamental importance, as the chosen legal regime determines their inclusion in the legal protection system and the nature of the rights that subjects will have [2].

A separate area of research is devoted to the application of existing mechanisms for the protection of intellectual property rights to the results of artificial intelligence activities, which includes both an analysis of current legislation and the development of proposals for its adaptation [3].

The scientific discussion also touches upon the conditions of protectability of such objects, in particular, the criteria of originality, creative contribution and novelty are considered, without which it is impossible to give the results of intellectual activity a legally significant status [4].

In addition, the researchers' works examine general approaches to the legal regulation of relations arising in connection with the use of artificial intelligence, including issues of distribution of responsibility [5], delimitation of powers and

definition of the boundaries of permissible interference of technologies in the sphere of creativity [6].

Of particular importance is the study of foreign experience, where attempts are being made to develop models of legal protection for objects generated by artificial intelligence and to assess their applicability in national legal systems [7].

A number of researchers are addressing the issue of defining the legal personality of artificial intelligence within the intellectual property system. These researchers emphasize that developing a legal position requires a more thorough understanding of the status of technologies involved in the creation of works, inventions, and other objects traditionally considered the results of human intellectual activity [8].

More radical positions have also been found in the literature, according to which artificial intelligence may be granted copyright to the results of its activities, which would require a fundamental revision of traditional notions of legal subject matter [9]. Such ideas are certainly of interest for the development of doctrinal discussion; however, such concepts extend beyond the scope of intellectual property law, as the question of recognizing technologies as subjects of copyright is only possible if they are granted independent legal status within the legal system. Consequently, discussions about assigning intellectual property rights to artificial intelligence should be considered premature at this time.

Despite the existence of a significant volume of scientific research devoted to issues of legal regulation of relations associated with the use of technologies of generative algorithms of artificial intelligence, the central object of research most often turns out to be issues related to determining the legal nature of the results of such activities.

At the same time, comparatively less attention is paid to the protection of intellectual property rights to objects that serve as source material for the training and operation of artificial intelligence technologies, as well as to the analysis of legal mechanisms for their protection in cases where the use of such objects is carried out by developers or users of technologies without the proper consent of the copyright holders.

It should be noted that, to achieve results comparable in level and nature to works of human intellectual activity, artificial intelligence technologies rely on existing and legally protected intellectual property during their training and subsequent operation. Moreover, the training and operation of artificial intelligence technologies utilizes a significant number of protected copyrights works simultaneously [10], which creates the difficulty of determining the contribution of each specific work to the formation of a new result, especially if the final product possesses independent originality [11].

Thus, the process of training artificial intelligence technologies can potentially be accompanied by a violation of intellectual property rights, the identification of

which is extremely difficult and hard to prove in law enforcement practice, since the results created by artificial intelligence are not direct copies of the original objects, but only reproduce individual characteristic features of the works used in training.

According to the provisions of the Civil Code of the Russian Federation, the exclusive right to a work belongs to its author or other copyright holder and encompasses the right to use the work in any form and by any means consistent with the law. Accordingly, any use of a copyrighted work requires the consent of the copyright holder. This rule applies to scientific, literary, and artistic works and encompasses all possible forms and methods of their use, regardless of whether it is for commercial or non-commercial purposes. However, according to Article 1229 of the Civil Code of the Russian Federation, the absence of an express prohibition does not constitute consent to the use of the relevant work.

At the same time, the copyright system provides for certain instances of free use of works and related rights objects, in which the consent of the copyright holder is not required. These cases traditionally include the reproduction of works for personal use, citation for scientific, critical, or informational purposes, the use of works in education, and their use by libraries, archives, and educational institutions, subject to the conditions established by law. Furthermore, certain provisions of the Civil Code of the Russian Federation provide for the possibility of using works without the consent of the copyright holder, but with the payment of fair compensation, for example, in the case of public performance or reproduction for the purpose of ensuring access to a wide audience. Thus, it can be concluded that currently, there are no provisions in legislation directly regulating the use of copyright and related rights objects for the purpose of teaching artificial intelligence technologies.

Moreover, the prospect of recognizing the use of copyrighted objects for training artificial intelligence technologies as a legitimate limitation of exclusive rights is questionable [12]. In accordance with the provisions of Article 1229 of the Civil Code of the Russian Federation, limitations on exclusive rights must be strictly defined, not conflict with the normal use of objects, and not infringe the legitimate interests of copyright holders.

The use of scientific, literary, artistic, or other protected works as training materials for artificial intelligence technologies does not always correspond to the purposes for which these intellectual property results were created by their authors. The original purpose of such works is linked to their independent cultural, scientific, or practical significance, whereas their inclusion in machine learning implies an entirely different use, aimed at developing algorithmic models, which is not within the traditional understanding of their application and may conflict with the exclusive rights of copyright holders.

It appears that in the future it will be possible to create intellectual property objects designed for training artificial intelligence technologies, which would allow the purpose of such works to be aligned with the goals of their application in algorithmic processes and would minimize potential violations of the exclusive rights of authors and other copyright holders.

However, as OpenAI notes, training leading AI models today is impossible without the use of copyrighted materials, due to the fact that copyright covers virtually all forms of expression of human activity, and limiting training data exclusively to publicly available works does not ensure the necessary quality and functionality of AI systems capable of meeting the needs of modern society [13].

Since the use of copyrighted objects inevitably infringes the exclusive rights of copyright holders, their prior consent becomes a mandatory condition for the legal training of artificial intelligence algorithms. The training process cannot be considered a permissible use within the normal functioning of the objects and is not included in the exceptions established by law. In practice, however, developers of generative artificial intelligence algorithms often do not contact authors and other copyright holders to obtain the appropriate consent [14]. In this regard, it seems necessary to consider the possibility of developing special regulations that would allow the legal use of intellectual property for educational and research purposes in the creation and improvement of artificial intelligence technologies, while simultaneously ensuring the interests of authors and copyright holders.

It is worth noting that the regulatory framework for intellectual property protection in the digital environment should generally be based on the principles of anthropocentrism, which prioritizes human rights and interests in interactions with machines and technology, thereby ensuring a harmonious combination of technological innovation and the protection of individual rights.

In the context of generative artificial intelligence algorithms, the protection of human rights takes on particular importance, as humans are the authors of the original objects used in learning and the operation of the technologies. At the same time, the results created by artificial intelligence possess independent originality and may not have a direct material form, requiring a clear definition of the legal status of such objects and their relationship with the rights of the authors of the original materials.

Thus, the primary objective in legal regulation of objects created by artificial intelligence is to identify the conditions and circumstances under which the use of protected works in the training of advanced technologies may cause harm to authors and other copyright holders, as well as to develop mechanisms to prevent such violations. Recognizing the results of artificial intelligence as objects of intellectual property without adequate protection of the rights to the source materials contradicts the fundamental principles of intellectual property law.

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使用禁止的作战手段和方法的地点、时间、情况、方法和手段
PLACE, TIME, SITUATION, METHOD AND MEANS OF USING PROHIBITED MEANS AND METHODS OF WARFARE

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摘要：本文分析了使用禁用作战手段和方法客观方面的选择性要件。分析表明，使用禁用作战手段和方法的地点仅对某些类型的犯罪构成要件，而犯罪发生的时间和背景构成该犯罪客观方面的要件。论证了在分析使用禁用作战手段和方法的客观方面时，需要将犯罪发生的时间和背景等要件综合考虑。

关键词：禁用作战手段和方法；客观方面；地点；时间；形势。

Abstract. *This article analyzes optional elements of the objective aspect of the use of prohibited means and methods of warfare. The analysis demonstrates that the location of the use of prohibited means and methods of warfare is a mandatory element only for certain forms of the crime, while the time and context of the crime constitute mandatory elements of the objective aspect of the crime in question. The need to consider such elements as the time and context of the crime in their entirety when analyzing the objective aspect of the use of prohibited means and methods of warfare is demonstrated.*

Keywords: *prohibited means and methods of warfare, objective side, place, time, situation.*

To characterize the objective aspect of the use of prohibited means and methods of warfare, such factors as the place, time, circumstances, method, and means of committing the crime are crucial. If these factors are defined in Article 356 of the Criminal Code of the Russian Federation (hereinafter referred to as the CCRF) or relevant international treaties of the Russian Federation, they constitute mandatory elements of the objective aspect of the crime under consideration [4].

In particular, the place of use of prohibited means and methods of warfare, such as plunder of national property in the occupied territory and deportation of the civilian population, is defined as the occupied territory, and therefore this element is mandatory in this case. Considering that the place of commission of the crime is not a mandatory element for all alternative acts defined by the disposition

of the main elements of the crime we are considering, and also that the use of the term “occupied territory” significantly narrows the place of commission of this crime, we believe that the proposal of certain authors to exclude the words “in the occupied territory” from the disposition of Part 1 of Article 356 of the Criminal Code of the Russian Federation [5, p. 248] is unjustified. However, it should be taken into account that the element “territory of other states” is mandatory for such forms of use of prohibited means and methods of warfare as “plunder of national property”. Based on the fact that the objective side of war crimes is mostly characterized by complex, ramified activity over a large territory (sometimes several states), the place of action does not always coincide with the place of occurrence of socially dangerous consequences (in crimes with a material composition).

The time of commission is a specific period of time during which prohibited means and methods of warfare are used, i.e., during an armed conflict. The time of commission is a mandatory element of the crime in question, since the use of prohibited means and methods of warfare can primarily only be committed during a war (armed conflict). In accordance with the provisions of the international treaties of the Russian Federation, Article 356 of the Criminal Code of the Russian Federation provides for criminal liability for the use of prohibited means and methods of warfare during international armed conflicts. Given the growing number of non-international conflicts, there is a need to include in the Criminal Code of the Russian Federation liability for the commission of such crimes during non-international armed conflicts.

The meaning of the term “armed conflict” deserves special attention. Russian legislation uses the terms “war,” “military action,” “armed conflict,” and the like. International law prefers the term “armed conflict,” for both terminological and legal reasons. First and foremost, it’s worth recalling the International Law Commission’s 1949 decision to exclude the term “war” from its codification work, as stated in a report to the UN General Assembly: “since war has been outlawed, regulation of its conduct has become pointless” [1, p. 81].

However, the prohibition on the use of force against the territorial integrity and political independence of states, proclaimed in paragraph 4 of Article 2 of the UN Charter, unfortunately, has not led to the disappearance of armed conflicts. Furthermore, the UN Charter provides for the lawful use of armed force in cases of legitimate individual or collective self-defense (Article 51), as well as by decision of the UN Security Council in cases of threats to the peace, breaches of the peace, and acts of aggression (Article 42 of the Charter).

From the point of view of terminological understanding, “war is a state of affairs between two States, or between two groups of States, or between a State and a group of States, which is typically characterized by the severance of diplomatic relations, the consequent suspension of the application of the general rules

of international law in peacetime, and a common determination to commit violent acts, even if such acts do not actually take place" [1, p. 112]. War is discord and military combat between States; international strife [2, p. 230].

The concept of "armed conflict" encompasses a broader range of armed situations than the concept of "war," which refers only to armed conflicts of an international nature. There is an example in judicial practice where a German court, when determining the pension amount of a claimant who participated in the armed events in Spain in 1936-1939, issued a negative conclusion regarding the application of the term "war" to these armed events. Defining the concept of "armed conflict," the International Criminal Tribunal for the former Yugoslavia stated: "An armed conflict exists whenever States resort to force or whenever protracted armed conflict occurs between government forces and organized armed groups or between such groups within a State" [6]. At the same time, the term "war" is more commonly used.

The circumstances of the commission of a crime, which are understood as specific objective and subject-matter conditions in which the crime is committed, is a mandatory feature of the objective side of the crime we are considering, in the case of the existence of an armed conflict without an official declaration of war or, in certain cases, after the end of the war. In support of this, one can cite the requirements of Part 1 of common Article 2 of all Geneva Conventions of 1949, according to which the provisions of the Geneva Conventions are applied not only in cases of a "declaration of war", but also in the case of "any other armed conflict". According to Article 3 of Additional Protocol I, the provisions of this Protocol and all Geneva Conventions of 1949 are applied in the case of military occupation, regardless of its duration. "Responsibility for violations of the laws and customs of war in relation to prisoners of war and civilians exists not only during the war but also after its end - until the release and repatriation of these persons" [3].

According to Article 118 of the Geneva Convention Relative to the Treatment of Prisoners of War, parties to the conflict are obliged to release and repatriate prisoners of war and interned civilians immediately after the end of active hostilities, without waiting for the conclusion of a peace treaty [3]. However, these international legal norms are not always observed. It may happen that after the end of the occupation regime, persons detained in connection with the conflict may remain in prisons or internment camps. Thus, despite the fact that military actions in the Iran-Iraq conflict ended in 1988, as the International Committee of the Red Cross noted in 1992, 20,000 Iranian prisoners of war remained in Iraq and 1,000 Iraqi prisoners of war in Iran. During the Somali-Ethiopian conflict in Ogaden (1977-1978), an agreement on the repatriation of prisoners of war and civilians was concluded only eleven years after the end of hostilities. Therefore, in accordance with Article 5 of the Geneva Convention for the Amelioration of the

Condition of the Wounded and Sick in Armed Forces in the Field, Article 5 of the Geneva Convention relative to the Treatment of Prisoners of War, the provisions of these international treaties apply to such persons until their final release (repatriation) [3].

Taking into account the above, it can be argued that it is necessary to consider, when analyzing the objective side of this crime, such features as the time and circumstances of the crime, in their entirety.

In determining the elements of many criminal acts, the method of commission—the set of techniques and methods used to commit the crime—is crucial. There are many different ways to use prohibited means and methods of warfare, which are a mandatory element of the objective element of the crime, as they are expressly stated in Part 1 of Article 356 of the Criminal Code of the Russian Federation. Therefore, establishing the methods in each case is mandatory. A distinctive feature of the objective element of the use of prohibited means and methods of warfare, committed in the form of "cruel treatment of prisoners of war or the civilian population," is that the infliction of particular torment and suffering on the victim should be considered as a specific feature of the method or context in which this crime was committed. In our opinion, the methods used to commit prohibited means and methods of warfare, in particular, have influenced the definition of these crimes as particularly dangerous and classified as international crimes, or war crimes. Therefore, in practice, difficulties arise in defining and identifying a particular method of committing a war crime.

The means by which the crime is committed are also important in characterizing the objective aspects of certain forms of using prohibited means and methods of warfare. Article 356 of the Criminal Code of the Russian Federation stipulates that the use of prohibited means and methods of warfare also includes the use of means of warfare prohibited by international law. In international law, these means (for example, chemical or bacteriological weapons, etc.) are specified in special conventions and treaties.

Thus, the place of use of prohibited means and methods of warfare, taking into account its definition in Article 356 of the Criminal Code of the Russian Federation or an international treaty of the Russian Federation, is a mandatory feature only of certain of its forms (for example, the plunder of national property).

The time of commission of this crime is a mandatory element, as it can only be committed during war (armed conflict). It is proposed to include liability for committing war crimes in the Russian Criminal Code during non-international armed conflicts as well.

The circumstances in which the crime was committed is a mandatory feature of the objective side of the crime in question, during a war (armed conflict) or, in

cases specified by international treaties of the Russian Federation, after the end of a war (armed conflict).

The necessity of considering, when analyzing the objective side of the use of prohibited means and methods of warfare, such features as the time and circumstances of the commission of the crime, in their entirety, has been proven.

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死后生育与儿童权利：上合组织成员国及其他国家的比较法律研究
POSTHUMOUS REPRODUCTION AND THE RIGHTS OF THE CHILD: COMPARATIVE LEGAL STUDY OF SCO MEMBER STATES AND BEYOND

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摘要：本文探讨了死后生殖（指使用死者配子或胚胎来怀孕）所面临的法律和伦理挑战。文中概述了对其法律性质的三种主要理论路径：身后生殖自主权、生殖意愿作为继承的一种形式以及将其视为一项独特的法律制度。本文以上海合作组织成员国（俄罗斯、中国、印度、哈萨克斯坦、乌兹别克斯坦、吉尔吉斯斯坦）为例，重点介绍了各国对此的不同应对措施——从俄罗斯传统的限制性立场（近期宪法承认了某些社会权利）到中国的有条件放宽模式以及印度的个案司法实践；中亚国家仍存在法律空白。对国际实践（美国、欧洲人权法院）的比较分析表明，这些国家缺乏统一的标准，且拥有较大的自由裁量权。本文认为，上合组织国家可以通过制定联合软法文书和研究倡议来增强法律确定性，保障死后受孕儿童的权利，并尊重文化多样性。

关键词：死后生育；辅助生殖技术；儿童权利；继承法；生殖自主权；上合组织；比较法；生物伦理学。

Abstract. *This article explores the legal and ethical challenges of posthumous reproduction, defined as the use of gametes or embryos of a deceased person to conceive a child. It outlines three major doctrinal approaches to its legal nature: reproductive autonomy beyond death, reproductive will as a form of inheritance, and recognition as a sui generis legal institute. Using the example of Shanghai Cooperation Organisation (SCO) member states (Russia, China, India, Kazakhstan, Uzbekistan, Kyrgyzstan), the article highlights diverse national responses – from Russia's traditionally restrictive stance (with recent constitutional recognition of certain social rights) to China's conditionally permissive model and India's*

case-by-case judicial practice; Central Asian countries remain in a legal gap. Comparative analysis of international practice (United States, European Court of Human Rights) shows the absence of harmonized standards and the wide margin of appreciation left to states. The article concludes that SCO countries could benefit from developing joint soft law instruments and research initiatives to enhance legal certainty, safeguard the rights of posthumously conceived children, and respect cultural diversity.

Keywords: *posthumous reproduction; assisted reproductive technologies; child's rights; inheritance law; reproductive autonomy; SCO; comparative law; bioethics.*

The rapid development of assisted reproductive technologies (hereinafter ART) has generated unprecedented legal and ethical challenges. A particularly contested issue is posthumous reproduction (hereinafter PR), defined as the use of the gametes or embryos of a deceased person to conceive a child. This practice raises fundamental questions concerning the scope of reproductive autonomy, the legal significance of parental consent, and, most importantly, the rights of children conceived posthumously, including the right to identity, knowledge of one's parentage, and inheritance entitlements.

The issue is particularly relevant for the Shanghai Cooperation Organisation (SCO) member states. These countries represent diverse legal traditions—civil law, common law, and religiously influenced systems – yet all face the task of addressing new biomedical realities. Posthumous reproduction highlights tensions between technological possibilities and legal certainty, while also emphasizing the need for regional dialogue and harmonization.

Posthumous reproduction lies at the intersection of family law, inheritance law, constitutional guarantees, and bioethics. Scholars have proposed three major approaches to its legal nature:

1. **Reproductive autonomy beyond death** – posthumous reproduction is seen as a continuation of the individual's reproductive will, provided that explicit consent was given during life [1].
2. **Reproductive will as inheritance** – the decision to allow reproduction after death may be interpreted as a special form of succession, or "reproductive testament" [2].
3. **Sui generis legal institute** – due to its complexity, posthumous reproduction should be regulated as a unique phenomenon, with its own norms balancing parental will, the rights of the child, and public interest [3].

Identifying the legal nature of posthumous reproduction is not a merely theoretical exercise. The chosen qualification determines which branch of law governs, what rights and obligations arise, and how conflicts are resolved. For exam-

ple, viewing posthumous reproduction as an extension of reproductive autonomy emphasizes consent and parental will; interpreting it as a form of succession foregrounds inheritance rules and temporal limits; while treating it as a sui generis institute requires the development of dedicated legal norms. The decision over which approach is most appropriate thus directly affects the protection of children's rights, the scope of reproductive freedom, and the predictability of legal outcomes. For SCO member states, adopting a coherent approach is particularly important given their diverse legal traditions and the need for regional dialogue and harmonization. To illustrate these differences, let us consider individual SCO countries separately.

- **Russia** – traditionally, Russian law has followed a restrictive approach. Article 1116 of the Civil Code states that heirs may only include those conceived during the parent's lifetime [4], and courts consistently excluded posthumously conceived children from succession. However, in 2025 the Constitutional Court of the Russian Federation delivered a landmark ruling [5]: for the first time, it recognized the rights of a child conceived after the father's death, granting entitlement to a survivor's pension. This decision marked a fundamental shift in Russian law. While inheritance rights under civil legislation remain unresolved, the Court's recognition of social rights (in particular, access to state benefits) signals a growing readiness to protect posthumously conceived children and could pave the way for broader reforms in family and inheritance law.
- **China** – The Regulation on Human Assisted Reproductive Technology permits the use of assisted reproductive technologies under strict medical and ethical supervision. While posthumous reproduction is not explicitly regulated, courts have occasionally allowed it, especially when prior consent was documented. This indicates a conditional permissive model. Recent empirical research confirms this [6]. A large-scale multi-dimensional survey conducted in China found relatively high approval rates for posthumous assisted reproduction: 79.10% among the general public, 55.32% among IVF couples, and 58.89% among ART practitioners. Importantly, most participants (over 70%) agreed that the psychological well-being of offspring should be prioritized before making a decision on PR (Huang et al., 2022). This shows that public and professional opinion in China is evolving towards conditional acceptance, and legislation or ethics guidelines may soon follow.
- **India** – Indian jurisprudence has dealt with cases of widows seeking to use stored gametes of deceased husbands. Courts have generally accepted the practice when family consent exists, though inheritance rights remain unsettled. India represents a case-by-case judicial model.

- **Kazakhstan, Uzbekistan, Kyrgyzstan** – These states regulate ART but do not address posthumous reproduction directly. The result is a legal vacuum, leaving questions of inheritance and parental consent unresolved.

This diversity of models shows that SCO countries lack a unified framework, reflecting broader tensions between cultural traditions and modern technologies. Globally, approaches to posthumous reproduction and inheritance vary widely.

United States – Federal law does not regulate posthumous reproduction, leaving states to decide. Some, like Massachusetts (Woodward v. Commissioner of Social Security [7]), allow inheritance if explicit consent was provided, while others reject such claims (Astrue v. Capato [8]). The result is federal pluralism.

European Court of Human Rights (ECtHR) – In Evans v. United Kingdom [9] and Baret & Caballero v. France [10], the Court stressed that states retain wide discretion ("margin of appreciation") in regulating posthumous reproduction, though the rights to private and family life remain relevant.

These examples show that even advanced jurisdictions have yet to develop harmonized standards. For SCO countries, comparative experience can provide guidance while respecting cultural and ethical diversity.

Posthumous reproduction represents a profound legal and ethical challenge. For SCO countries, the key problems include:

- the uncertain legal status of children conceived after a parent's death;
- the absence of unified rules on consent and inheritance rights;
- tensions between legal certainty, reproductive autonomy, and the best interests of the child.

The analysis shows that Russia follows a restrictive approach, though the 2025 Constitutional Court ruling marks a significant breakthrough. China and India are more flexible, and Central Asian states face a legal vacuum. International practice – from U.S. federal pluralism to EU restrictions – demonstrates that there is no single model, but lessons can be drawn for future regulation.

To address these challenges, SCO countries could initiate joint research projects and soft law instruments (such as model guidelines or recommendations) on posthumous reproduction. Such cooperation would strengthen legal certainty, protect the rights of the child, and ensure respect for cultural and ethical values across the region.

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人工智能在放射诊断筛查方法中的应用，需要法律监管和标准化
ARTIFICIAL INTELLIGENCE IN SCREENING METHODS OF RADIATION DIAGNOSTICS, THE NEED FOR LEGAL REGULATION AND STANDARDIZATION

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注释：本文以筛查研究为例，探讨了人工智能在放射学中的应用。文中介绍了人工智能在加速诊断、提高人群定量和定性覆盖率以及减轻放射科医生工作量方面的作用。此外，文中还探讨了人工智能与专科医生互动的法律问题及其实施的社会经济影响。并列举了人工智能在肿瘤病理早期发现中的成功应用案例。

关键词：人工智能、放射诊断、筛查方法、移动网络运营商 (MNO)、筛查、放射科医生、医疗保健、人工智能与医生互动的法律问题、"两次读数"算法。

Annotation. *This article explores the use of artificial intelligence in radiology, using screening studies as an example. It presents the role of artificial intelligence in accelerating diagnostics, increasing the quantitative and qualitative coverage of the population, and reducing the workload of radiologists. The legal aspects of the interaction between artificial intelligence and specialists, as well as the socioeconomic impact of its implementation, are discussed. Examples of the successful application of artificial intelligence for the early detection of oncological pathologies are provided.*

Keywords: *Artificial intelligence, radiation diagnostics, screening methods, MNO, screening, radiologist, healthcare, legal aspects of interaction between AI and physician, "two readings" algorithm.*

Malignant neoplasms of the lungs and breasts in women remain a major public health problem worldwide. Despite advances in diagnostic equipment and treatment methods, lung and breast cancers remain the leading causes of morbidity and

mortality. Lung and breast cancers are often diagnosed at stages III and IV due to their prolonged asymptomatic course, significantly worsening the prognosis for patients. Various screening programs have been developed to reduce mortality from lung and breast cancer in women.

Screening is generally understood to be the active detection of a disease in individuals who consider themselves healthy, or who are considered healthy and have no symptoms of the disease being detected. Screening is “detection among an apparently healthy population...”. It is a medical method aimed at detecting diseases in people who are healthy at first glance, as well as at assessing the risks of developing the disease [15]. The appropriateness of screening for a particular disease is determined, according to Wilson JMG and Jungner G, by ten principles [14,15]: the disease being detected must be a significant problem for human health; methods for diagnosing the disease must be available; effective and affordable methods of treating the disease must exist; the disease being detected must have a recognizable early clinical and/or latent stage; diagnostic tests or studies suitable for screening must exist; diagnostic methods used as screening tests must be acceptable to the population; patterns of disease development from the latent form to the stage of clinical manifestations must be well researched and understood; The principle of identifying individuals in need of treatment must be clearly defined; the costs of identifying cases of the disease (including screening, diagnosis and treatment) must be economically balanced with the possible costs of health care as a whole; screening must be a continuous, consistent process, and not a one-time action.

Artificial intelligence algorithms can serve as a tool for improving screening, and additional studies to identify patients at risk can increase the effectiveness of screening programs. Today, artificial intelligence (AI) is actively used to speed up image processing, performing the function of initial image reading. This reduces diagnostic time and expands patient coverage. However, responsibility for the final conclusion still rests with radiologists, requiring a balanced approach to the interaction between AI and specialists.

The aim of this article is to explore the role of AI in screening studies, its impact on diagnostic speed and coverage, as well as the legal aspects of interaction between AI and physician.

The history of AI in radiology began with simple computer-assisted image interpretation systems, but in recent years, with the development of deep learning and big data, these systems have become significantly more accurate. Today, AI can analyze digital X-rays, CT scans, and MRIs, suspecting cancer at early stages, identifying developmental abnormalities and other signs of disease, and doing so faster than doctors can do it manually. In breast cancer screening, AI has already demonstrated high effectiveness in identifying suspicious lesions, as confirmed by studies showing higher accuracy compared to traditional methods [1].

One of the main advantages of AI is the reduction in image processing time. With the ability to analyze large volumes of data in seconds, AI helps speed up the diagnostic process, which is especially important in conditions of specialist shortages. This not only reduces the workload of doctors but also increases the availability of diagnostics for patients, especially in resource-limited regions, and minimizes the risk of human error, as AI algorithms can detect even minor abnormalities that might be missed by doctors [2].

Furthermore, using AI as a first read (preliminary image analysis) allows radiologists to focus on more complex cases that require manual interpretation. This not only speeds up the process but also optimizes the use of medical resources, leading to lower healthcare costs and increased population coverage of screening programs.

Artificial intelligence algorithms in radiology utilize machine learning and computer vision technologies to analyze digital mammograms and CT scans to detect early signs of cancer. AI algorithms are trained on large datasets containing labels specified by physicians, enabling them to identify abnormal, suspicious areas, such as lung nodules and amorphous microcalcifications in the breast, which may be indicators of malignancy. AI processes images using pre-trained models to recognize patterns that may indicate the presence of atypical cells. A key feature of these algorithms is their ability to quickly analyze a huge number of images, significantly reducing physician workload and accelerating the diagnostic process. AI systems are capable of classifying images into risk categories (low, medium, and high), allowing physicians to focus on complex and suspicious cases while the AI processes simpler ones.

In studies conducted in Denmark and Sweden, AI reduced the number of false-positive results and decreased unnecessary patient recalls. The introduction of AI also contributed to improved detection of invasive tumors at early stages, which is key to improving survival [3].

The use of AI in fluorography significantly expands diagnostic capabilities for lung diseases such as tuberculosis and lung cancer. One of the key features of AI in this field is its ability to automatically analyze chest images, identifying pathological changes that may be associated with these diseases.

AI helps speed up the detection of tuberculosis, which is especially important in regions with high incidence rates where the number of radiologists is limited. For example, in studies using deep learning, AI demonstrated high accuracy in analyzing X-ray images, identifying tuberculosis lesions and reducing the workload of physicians. This allows for timely treatment of patients and prevents the spread of the disease [4].

Deep learning technologies such as ResNet50 and VGG16 enable AI not only to recognize patterns characteristic of malignant neoplasms but also to do so with

high accuracy and speed. This is particularly useful for screening programs, as AI significantly accelerates diagnosis, allowing for the coverage of more patients in less time [5].

The "two readings" algorithm using artificial intelligence works as follows:

1. Primary reading with AI.

Artificial intelligence processes images and analyzes them for pathologies, such as tumors or other anomalies. It assigns each image or image region a risk score based on trained models (e.g., from 0 to 10), with higher scores indicating a high probability of pathology.

2. Assessment by a radiologist.

If the AI classifies an image as low-risk, it may mean the doctor doesn't waste time reviewing it. However, if the AI detects high risks, the image is sent to a radiologist for detailed analysis.

Arbitration in case of disagreement. If the physician disagrees with the findings of the AI, an arbitration process is initiated, during which additional testing is ordered or other specialists are brought in to resolve the dispute. The physician is obligated to justify their decision, and if the conclusion is subsequently proven to be erroneous, responsibility for that decision falls on the physician [6].

In Europe and the US, physicians are given additional legal safeguards when using AI, but they are required to undergo training in how to use such systems and to use AI as an auxiliary tool rather than as the sole source of diagnosis [7].

The role of AI-based first reading in screening studies is to provide an initial automated assessment of medical images, such as mammograms and chest x-rays, to identify suspicious abnormalities. AI helps reduce image processing time and free up physicians to focus on more complex cases, which is especially important in mass screening programs. In most cases, low-risk cases can be automatically triaged by AI without physician intervention.

However, this practice carries risks: if the AI classifies an image as low-risk, there's a chance that pathological changes may be missed. In such cases, the image's fate depends on the AI system's settings and the design of the screening program.

Fully automated triage poses a potential risk. In these cases, if an AI system assesses an image as low-risk, it may not be sent to a physician for re-examination, and potential pathological changes may go undetected. For example, some studies have shown that AI can miss so-called "interval cancers," which develop between regular screenings [8]. More sophisticated systems may include selective re-examination of a small proportion of low-risk images for quality control. This is done to ensure that the AI is functioning correctly and is not missing important pathological changes. In EU countries, "dual reading" processes are regulated by the Medical Devices Directive (MDR), which requires all medical AI systems to

undergo rigorous certification and testing for compliance with safety standards [9].

In Russia, the use of AI in medical practice is regulated by Federal Law No. 323-FZ "On the Fundamentals of Health Protection of Citizens in the Russian Federation," which requires the mandatory participation of a physician when making a final diagnosis, despite the use of automated systems [10].

Benefits of AI-powered first reading:

1. Speed and efficiency. AI significantly speeds up the process of image reading, automatically sorting them by risk level. This allows doctors to spend more time on patients with suspicious results and increases the coverage of screening programs. For example, in mammography studies, AI was able to reduce the number of images requiring manual analysis by almost 50%, reducing the workload for doctors and reducing diagnostic time [11].

2. Improving diagnostic accuracy. AI can detect abnormalities that are sometimes difficult for humans to notice. This is especially important in early cancer diagnosis, where the slightest changes in images can be critical to the prognosis.

3. Resource Allocation. The first stage of AI-assisted reading allows for more efficient allocation of clinic resources. Doctors can focus on high-risk cases, leaving the automated system to analyze low-risk ones. This increases efficiency and reduces the likelihood of errors due to physician fatigue or overwork.

The initial use of AI raises a number of legal and ethical issues for physicians. For example, physicians are ultimately responsible for the final conclusion, even if the initial diagnosis was made using AI. This requires physicians to understand how AI systems work and be able to explain the diagnostic process to patients, including its limitations.

There is a risk that physicians may rely on AI (automation bias) and fail to consider conflicting data that could indicate AI error. If a physician accepts an incorrect AI conclusion, this could lead to legal consequences, especially if the error leads to an incorrect diagnosis. On the other hand, if a physician decides not to follow an AI's suggestion, they must provide a justification for why they disagreed with the algorithm's suggestion [12].

Thus, despite the significant advantages of AI in radiology, its use requires strict regulation and a clear division of responsibilities between AI developers, healthcare institutions, and specialist physicians. The implementation of artificial intelligence in screening programs has a significant economic and social impact on healthcare systems. One of the main economic effects is a reduction in diagnostic costs by accelerating the image analysis process and freeing up physicians' time to work on more complex cases. This allows for more screenings to be performed at a lower cost and with less time, making diagnostics accessible to more patients [13]. The social effects are also significant. AI makes it possible to provide access to

high-quality diagnostics in regions with a shortage of physicians. This is especially important for rural and remote areas, where access to healthcare services may be limited. Furthermore, AI contributes to increased diagnostic accuracy, which can improve public health through the early detection of diseases such as cancer and tuberculosis and increase life expectancy.

In summary, artificial intelligence has proven itself to be an effective tool for accelerating screening in radiology. It significantly reduces image processing time and allows radiologists to focus on complex cases, improving diagnostic accessibility. However, it is important to maintain a balance between the effectiveness of AI and the legal liability of physicians, as the final decision remains with the radiologist. This requires careful monitoring of AI results and the active participation of specialists in the diagnostic process. Today, there is a need to regulate and standardize AI in medicine to ensure patient safety. AI developers and regulators must collaborate to ensure new technologies meet high quality standards and are safe for use in clinical practice. The prospects for using AI in radiology lie in its further improvement, which will lead to increased diagnostic accuracy and data integration for improved treatment and disease prevention. To achieve all these objectives, clear, detailed legal regulation of the use of AI in various areas of human activity is necessary, including in medical practice and in healthcare in general, when processing medical data and solving other problems.

Currently, AI is not legally recognized as an object of legal relations, including civil ones, so it is logical to consider it only from the perspective of intellectual property rights. We believe it is appropriate to develop a relevant, working regulatory framework for regulating medical and other areas based on the use of artificial intelligence.

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土耳其数字化转型模式的特点以及埃尔多安总统在此过程中所发挥的作用
FEATURES OF THE TURKISH DIGITAL TRANSFORMATION MODEL AND THE ROLE OF PRESIDENT ERDOĞAN IN THE PROCESS

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注释：本文探讨了土耳其的数字化转型模式。安卡拉在这一进程中的初始地位并非完全有利，无论是从科学、技术、财政还是经济角度来看。这导致了数字化转型管理高度集中，总统通过相关部委和机构对决策施加了重大影响。这种模式使土耳其政府在开发和实施自身相关技术方面取得了一定成果，提升了土耳其在国际舞台上的整体实力。然而，权力集中在总统手中的一个弊端是缺乏对其他重要政治力量和其他利益集团意见的考量，如果反对派上台，这可能会对土耳其的数字化发展造成不利影响。

关键词：数字地缘政治、土耳其、信息安全、数字化转型、信息通信技术、地理数字空间、人工智能。

Annotation. *This article examines the Turkish model of digital transformation. Ankara's initial position in this process was not entirely favorable, both from a scientific, technical, financial, and economic perspective. This led to a highly centralized approach to digital transformation management, with the president exerting significant influence over decision-making, including through relevant ministries and agencies. This approach has enabled the Turkish government to achieve certain results in developing and implementing its own relevant technologies, which enhance the country's overall strength on the international stage. However, a downside to concentrating power in the president's hands is the lack of consideration for the views of other significant political forces and other interest groups, which could lead to undesirable consequences for the country's digital development if the opposition comes to power.*

Keywords: *digital geopolitics, Turkey, information security, digital transformation, ICT, geodigital space, artificial intelligence.*

The article applies a digital geopolitics approach, which, however, is significantly broader than its traditional, structural direction.[1]or a more tendentious understanding[2]This study will apply the author's findings in the field of digital geo-

politics—the process of safeguarding the interests of states as the main actors in the emerging global geo-digital space, linking physical and virtual-information realities. Within this framework, four interconnected levels can be roughly identified: resources, infrastructure, cyberspace, and the information-cognitive field. Actors compete to ensure control over these levels in accordance with national priorities and goals, without which digital sovereignty cannot be achieved.

Turkey's accelerated digitalization began at a less-than-favorable starting point than many more developed countries. Even by 2023, when the widespread adoption of information and communications technology (ICT) across various spheres of life had long since become a global trend, the share of Turkish citizens with basic digital skills was only 30%, compared to the EU average of 54%. Moreover, by 2030, under favorable circumstances, Ankara will only be able to increase this figure to 56% (the EU expects 80%). Between 2017 and 2021, the ICT sector's share of the national economy was 2.9% (compared to 5.1% in the EU), businesses with high-speed internet access accounted for 60% (compared to 86% in the EU), and digital product and service exports in 2021 were 1.8% (compared to 11.5% in the EU). Data upload and download speeds via fixed (wired) internet were eight and three times slower than in the European Union (6 and 32 Mbps, respectively, versus 48 and 91 Mbps). Only 5.8% of subscribers had a fiber-optic connection in 2021—almost half the OECD average. Turkey's total fiber-optic network length needs to at least quadruple to 1.9 million km to catch up with leading countries.[3].

Turkey has never had a significant high-tech industrial base, strong scientific traditions, or a robust physics and mathematics school overall, which impacts the quality of specialized education and manifests itself in the paucity of significant fundamental and applied research results. Significant investments in infrastructure and talent acquisition are also required. Moreover, the latter continues to lead to an outflow of professionals, especially those educated abroad.

A significant role is played by the economic crisis that has been ongoing for several years, expressed, among other things, in the rapid devaluation of the national currency - the Turkish lira - and high inflation (according to official data from the Turkish Statistical Institute in May 2024, this figure was over 75% in annual terms; despite a further decline in August 2025, inflation was still very high - about 33%).[4], therefore Turkey's budgetary capacity to invest in digitalization development is seriously reduced.

The overall situation in this area has been aggravated by Turkey's significant dependence on foreign software—primarily from leading Western corporations—as well as electronic components. As a result, Turkey's indigenous ICT stack—its set of software tools and technologies—has long remained limited. As Turkish researchers, including Associate Professor M. Yeşilbag of Ankara University, note, even dynamically growing e-commerce platforms remain dependent on technolo-

gies from large American and Chinese corporations, particularly when it comes to web services.[5].

Turkish President Recep Tayyip Erdogan personally acknowledged the difficult situation, stating in March 2022 that in the digital world, domestic power is essential, and therefore Ankara needs to develop its own technologies, particularly software, as well as original content, preventing the "minds and hearts of young people" from becoming dependent on foreign social media. Overall, he stated, the country requires "digital mobilization."[6].

Hence, Ankara's goal is to achieve digital sovereignty and independence in strategic terms, and, from a practical perspective, accelerated development in order to meet basic needs through its own capabilities, and to try to become a world leader in certain, more critical areas.

The specific features of digitalization implemented in Turkey in recent years allow us to identify a separate model for its development (with specific attention to each level of the geo-digital space). If successfully implemented, this model will allow Ankara to become an influential digital player. The following are characteristic features of the Turkish model—both positive and negative:

1. High centralization of digital transformation management with significant influence of the country's president on decision-making;

2. Concentration of the country's limited resources on the development of digital transformation areas that have a "power" dimension;

3. Striving for the fastest possible monetization of digital achievements;

4. Significant emphasis in strategic documents related to ICT on enhancing one's own competencies, while maintaining ties with the Euro-Atlantic part of the world, as well as conceptual separation of its cyber aspects from information security;

5. The continuing lack of effective protection against negative information influences from outside;

6. The desire to develop one's own tools for information influence in the international arena;

7. Increasing the level of digital literacy of the population;

8. Gradually moving towards more assertive forms of defending Turkey's interests in the digital sphere and using digital technologies to ensure a leading position in the region;

9. Particular attention will be paid to the development of digital cooperation with member states of the Organization of Turkic States.

President Recep Tayyip Erdoğan plays a key role in the governance structure of digital transformation, having consolidated significant powers in his hands following the country's transition from a parliamentary to a presidential form of government in 2018. The Turkish leader possesses a fairly clear strategic vision

of priorities, and his political will, along with his established vertical governance structure, ensures a relatively high efficiency in mobilizing resources to achieve key goals, as well as the overall ability to promptly make decisions and implement them, despite existing natural bureaucratic barriers and structural deficiencies in the communication system between the state, the private sector, academia, and society in Turkey.

The Digital Transformation Office under the Turkish Presidential Administration is preparing conceptual proposals in this area, which must then be personally approved by Recep Tayyip Erdoğan. Their implementation falls to the executive authorities, primarily the Ministry of Industry and Technology and the Ministry of Transport and Infrastructure, as well as other industry agencies depending on their authority (the approval of agency heads is carried out with the approval of the Turkish president). The Ministry of Industry and Technology is responsible for the development of national ICT, including artificial intelligence (AI), cloud technologies and big data analysis, the Internet of Things, and the implementation of other applied innovations. The Scientific and Technological Research Council (TÜBİTAK), a highly influential body in Turkey responsible for research and development, reports to this ministry. The Ministry of Transport's purview includes issues primarily related to cybersecurity. Furthermore, the local regulator, the Information and Communications Technology Authority (ITK), is subordinate to this institution. In 2025, new key structures were established: the Cyber Security Council, chaired by R.T. Erdogan, which will address doctrinal and strategic issues in the digital sphere, and the Cyber Security Directorate.

In this scheme, leading private sector players, who are also de facto controlled by the head of state in one way or another, occupy a special place. In particular, one of the most important defense enterprises, Baykar Makina, stands out, producing unmanned aerial vehicles (UAVs), including the Bayraktar type. The chairman of the company's board of directors is Recep Tayyip Erdoğan's son-in-law, S. Bayraktar, which in itself speaks to their close ties. The importance of this economic operator stems from its digital achievements in the production of military products, which enhance Turkey's overall technological potential. Specifically, Baykar Makina develops object-oriented software, including navigation and other systems, specialized AI-based applications utilizing machine learning, flight control and guidance programs, etc., and also conducts related research and development.[7].

The downside of significantly concentrating powers in the president's hands is that decisions are made unilaterally by his team without a broad consensus among all significant political forces and other stakeholders, primarily those opposed to the current government. Consequently, a potential change in government will most likely lead to adjustments to the priorities, goals, and objectives of the digi-

tal transformation process, a reallocation of resources, the involvement of other economic entities close to the new leadership, and so on. Such a reconfiguration of process parameters is fraught with, at a minimum, a temporary reduction in efficiency, and, at worst, the loss of already acquired advantages in some areas while progress in others is lacking.

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埃蒂姆·埃敏歌词中的友谊与孤独主题：在悲伤与精神探索的交汇处
THE THEME OF FRIENDSHIP AND LONELINESS IN THE LYRICS OF ETIM EMIN: AT THE INTERSECTION OF GRIEF AND SPIRITUAL QUEST

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注释。本文分析了列兹金文学经典作家耶蒂姆·埃明诗歌中友谊与孤独的主题。通过分析其诗歌，揭示了这一主题从陪伴的喜悦到深刻的挽歌式悲伤的演变过程。文章探讨了忠于友谊理想的抒情英雄与他被遗忘的朋友以及道德沦丧的整个社会之间的对比。文章特别关注了埃明作品的宗教和哲学背景，尤其是苏菲派将死亡视为向另一种存在形式的过渡的观念，这使得诗人能够与逝去的朋友保持精神上的联系。文章还分析了塑造其抒情诗独特意象和情感强度的关键艺术手法。最终结论是，耶蒂姆·埃明的作品对永恒的精神价值进行了深刻的反思，与这个尘世的脆弱和不完美形成了鲜明对比。

关键词：埃蒂姆·埃敏、友谊主题、孤独动机、挽歌、加扎勒、雷迪夫、抒情英雄。

Annotation. *This article analyzes the themes of friendship and loneliness in the poetry of Yetim Emin, a classic of Lezgin literature. Using individual poems as examples, it reveals the evolution of this theme from the joy of companionship to profound elegiac sorrow. It explores the juxtaposition of the lyrical hero, faithful to the ideals of friendship, with both his forgotten friends and society as a whole, which is experiencing moral degradation. Particular attention is given to the religious and philosophical context of Emin's work, particularly the Sufi perception of death as a transition to another form of existence, which allows the poet to maintain a spiritual connection with departed friends. Key artistic devices that shape the unique imagery and emotional intensity of his lyric poetry are analyzed. It is concluded that Yetim Emin's work offers a profound reflection on eternal spiritual values in contrast to the frailty and imperfection of this earthly world.*

Keywords: *Etim Emin, the theme of friendship, the motive of loneliness, elegy, ghazal, redif, lyrical hero.*

The work of the classic Lezgin poet Yetim Emin is a profound philosophical and lyrical diary, where the theme of human relationships takes center stage. Through the prism of friendship, the poet explores the fundamental categories of existence: loyalty and betrayal, life and death, the transience of this earthly world and the eternity of spiritual bonds. While this theme is life-affirming in the early poem "To Friends," in later works such as "Dear Friends, Can You Remember Me?", "Greetings...," and "Send a Message to a Friend," it takes on a tragic, elegiac quality, revealing the full depth of the lyrical hero's loneliness in a world that has lost its moral compass.

The poem "Heartfelt Friends..." is built on a sharp juxtaposition between the lyrical hero and his former friends. The leitmotif of the work is a bitter rhetorical question: why did those he considered close forget about him?? This is not just a reproach for inattention, but a deep existential bewilderment: "When a beggar comes to you from the street, / Do you really not remember me? [2, p. 197].

The hero, who is in a state of extreme need and mental anguish ("a miserable person", "a life spent in hardship"), feels like an outcast whose existence is ignored.

The key point of the poem is its religious and moral core. Addressing his friends, the poet appeals not only to their human feelings, but also to their fear of God's judgment: "What will you answer to Zulzhalal?" (Zulzhalal is one of the names of God). Forgetting a friend is interpreted here not simply as a bad deed, but as to a sin that requires justification before the Almighty.

In the poem "I greet you..." To enhance the contrast, Emin uses similes, metaphors, and epithets: "Parting from you is like death" – points to the absolute value of friendship, equating its loss with life's greatest tragedy; "The spacious world has become cramped, the clear day has become cloudy" – the physical world narrows and fades under the pressure of the inner state of loneliness; "I fell into a deep pit of grief and melancholy" – a metaphor conveying the hopelessness and existential decline of the hero.

The poem is a ghazal in form, and an elegy in content. It is a lament not only for living but forgotten friends, but, as the text suggests, above all for the dead. It is the eternal separation caused by death that weighs on the poet "like a heavy burden of longing and grief."

Here, a key feature of Emin's worldview is revealed: the Sufi perception of death. The poet, a follower of Sufism, does not consider death a final rupture. His friends, having left the "mir-fana" (the mortal, transitory world), continue to exist in the "dear home of Islam" (paradise). Therefore, his address to them is not simply a poetic device, but a sincere prayer, a hope that a spiritual connection overcomes physical death. He asks them to pray for him, believing that their prayer will be heard. There is no complaint against God in this ("He accepts the

misfortune given to them"), but there is endless human grief, softened by faith in the eternity of the soul. This elevates the theme of friendship from the mundane to the highest spiritual plane, echoing Ibn Sina's understanding of friendship as a "golden treasury": "And why do you need honors, power and riches - In true friendship is your golden treasury" [3, p. 67.].

To convey a complex range of emotions, Emin masterfully utilizes a full arsenal of artistic devices. Rhetorical questions create a tone of bewilderment and pain. Thematic parallelism (variations on the same thought across several stanzas) reinforces the main idea, lending it the persistence of an obsessive thought. Characteristic doublings (greetings-well-wishes, grief-melancholy) thicken the emotional atmosphere. Contrasting antitheses ("the spacious world has become cramped," "the clear day-cloudy") visualize the hero's internal conflict:

Grieving in the world of fun, how to spend days and nights?

The spacious world has become cramped, the clear day has become cloudy, friends. [2, p.197].

While in the poem "Heartfelt Friends..." the conflict was personal (the hero and his friends), in the ghazal "Send a Message to a Friend," the scale of the tragedy expands to a universal scale. The lyrical hero here appears not only as suffering from separation but also as a "tormented, exhausted" man, lost in a world where moral principles are crumbling:

When a friend broke up with me and we spent a lot of time apart,
Send a message to your friend about the tears flowing from your eyes.

Day and night, my heart is black, becoming sad, I melt,
Send news of my destitute days to a friend.

One is jealous of the other, respect, morality, and science are lost.
Send news to your friend about the corrupted nations.

What are we going to do now? There are already hundreds of enemies,
Send a message to a friend about the sorrowful days and nights that have befallen us

I am sad, my heart is weakened, about the sorrow of a sinful slave,
Send news of Emin's bitter tears to your friend. [2, p.189].
(Line-by-line translation)

The recurring phrase at the end of each couplet, "Send a message to a friend," sounds like a haunting, almost desperate plea. It's the cry of a soul trying to reach out across the abyss of loneliness and chaos.

The poet offers a scathing assessment of contemporary society, seeing the root of his and everyone's woes in its profound moral crisis: "Everyone envies everyone else; respect, morality, and learning are lost. Send word to your friend about corrupted nations."

This stanza is key to understanding the poem's message. The tragedy of an individual is directly linked to the degradation of the entire world. The loss of respect, morality, and knowledge are symptoms of a society no longer capable of fostering genuine friendship and mutual understanding. The world becomes hostile ("there are already hundreds of enemies"), and the individual within it becomes lonely and defenseless.

The compositional ring (the finale's return to the images of the first stanzas) encloses the work in a circle of hopeless grief. The hero, "sad," with a "weakened heart," asks to convey to a friend the news of his "bitter tears," remaining alone in a cruel world.

The key pathos of the poem "Send a Message to a Friend" lies not in the direct juxtaposition of the individual and the world, but in the profound, piercing depiction of the inner drama of a "tormented, exhausted man." His suffering seems intensely personal and intimate—a cry from a soul separated from a friend and yearning in solitude. However, Emin masterfully expands the scope of this experience, elevating it to the level of a universal, social diagnosis. The poet offers a scathing assessment of his contemporary reality, where "everyone envies everyone else, respect, morality, and science are lost." The lyrical hero's personal tragedy is presented not as an isolated incident, but as a direct consequence and symptom of a general societal malaise—a profound spiritual crisis, a moral degradation that corrodes human connections. It is precisely this disintegrating world, having lost its "golden treasuries"—faith and morality—that is to blame for the individual's tragedy.

Thus, the theme of friendship in Etim Emin's poetry undergoes a complex evolution—from the radiant joy of fellowship and fraternal unity to the profound tragedy of separation and existential loneliness. Through the seemingly private, intimate prism of this theme, the poet raises the most complex philosophical and social questions of his time. His lyrical hero is a lonely, suffering individual, feeling alien in two worlds: he is contrasted both with former friends, immersed in the vein oblivion of the world, and with an entire society experiencing a profound spiritual crisis and having lost its former bearings. However, this tragic juxtaposition is not without hope and spiritual perspective. The poet's Sufi worldview, which views earthly life (mir-fana) as perishable and transitory, and death as a transition to another, eternal form of existence, transforms his elegies not into a cry of despair, but into a sublime spiritual bridge between worlds. Addressing his departed friends, the hero seeks and finds support not in the fickle and imperfect

world of the living, but in the eternal, unshakable values of faith, memory, and the inviolability of spiritual connection. This connection, he believes, can overcome the greatest human obstacle—death—transforming separation into a difficult but surmountable trial. This is precisely why the poet's poems, "having stood the test of time, live on... and are as relevant as they were then. For true poetry knows no bounds."[1] Their modernity lies in the enduring pain of the disintegration of the human spirit in a world without spirituality and in the eternal search for lost harmony. Etim Emin's work becomes a hymn not so much to friendship itself, but to its endless fidelity—a fidelity that becomes an act of resistance to chaos and spiritual salvation, even when the world around us does everything to destroy this fidelity.

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人工智能术语的认知和技术基础
COGNITIVE AND TECHNOLOGICAL FOUNDATIONS OF AI TERMINOLOGY

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摘要：本文探讨了医学和生物学术语对人工智能 （AI） 发展和理解的主要影响。作者探讨了生物系统与人工智能算法之间关系的历史根源。本文重点探讨了生物体信息处理和适应的进化机制如何成为神经网络和遗传算法的创造和发展的灵感源泉。

关键词：术语、生物学、医学、信息技术、人工智能。

Abstract. *This paper discusses the main aspects of the influence of medical and biological terminology on the development and understanding of artificial intelligence (AI). The author examines the historical roots of the relationship between biological systems and AI algorithms. The main focus of the paper is on how the evolutionary mechanisms of information processing and adaptation of living organisms have become a source of inspiration for the creation and development of neural networks and genetic algorithms.*

Keywords: *terminology, terms, biology, medicine, information technology, artificial intelligence.*

The use of biology terms in the field of artificial intelligence is associated with several key reasons that reflect both the historical development of this field of knowledge and the conceptual parallels between biological systems and artificial algorithms.

Over millions of years of evolution, nature has created effective information processing, adaptation, and learning mechanisms that scientists are trying to replicate in artificial intelligence.

On September 13, 1960, on the opening day of the International Symposium in Daytona in the USA “Living prototypes of artificial systems - the key to new technology”, which officially consolidated the creation of a new science, the term “bionics” was first used. It was proposed by the American researcher J. It was adopted as the official name of a new field of knowledge [Lionov, 2010].

This discipline has been actively developing in the last two decades, but close ties with nature and its mechanisms have existed throughout the history of mankind. The key idea of bionics as an interdisciplinary scientific approach is that evolutionarily optimized biological systems can serve as effective prototypes for creating innovative artificial solutions. For example, work on neural networks began with attempts to simulate the work of the brain, because our brain is the most powerful computer known. And the creation of the term "deep learning" was inspired by the multi-layered structure of neural networks in the brain.

The use of biology terms in the field of artificial intelligence highlights that neural networks are not just a set of algorithms, but systems that can mimic certain aspects of living organisms. This raises a number of ethical questions similar to those that arise in the field of cloning, for example, whether artificial intelligence can have consciousness.

I propose to consider some terms that have entered the terminology of artificial intelligence and were borrowed from the field of biology.

Neuron *is an exciting cell that has specialized cell parts (such as soma, dendrites and axons), structures (such as synapses), and chemicals (such as neurotransmitters) for conducting nerve impulses* [Biology Online].

'In the context of artificial intelligence and neural networks, a neuron is a mathematical function that models the behavior of a biological neuron. It receives one or more inputs, applies weights and biases to them, and then processes the result through an activation function to produce an output. Neurons are the fundamental building blocks of artificial neural networks, which are used in machine learning to solve tasks such as pattern recognition, classification, and prediction' [IBM].

What the definitions have in common is a functional analogy: both biological and artificial neurons serve to process and transmit information, although the implementation of this function differs. In biology, it is a cell that transmits information in the nervous system, and in information technology, it is a mathematical model that simulates the work of a biological neuron in neural networks.

Synapse *is a specialized structure or junction that allows cell to cell communication* [Biology Online].

A ***synapse*** *is the connection between nodes, or neurons, in an artificial neural network (ANN)* [DeepAI Glossary].

What synapse definitions have in common in biological and artificial contexts is that they serve to transfer information between individual elements (neurons), although the implementation of this function differs: in biology, it is a connection between neurons through which signals are transmitted, and in neural networks, it is a connection between neurons that has a certain weight that affects to send a signal.

Genetics *(genetic algorithm) - the study of the patterns of inheritance of specific traits related to genes and genetic information* [Biology Online].

In the context of artificial intelligence, ***genetics*** *refers to the use of genetic algorithms (GAs), which are search heuristics inspired by the process of natural selection. These algorithms are used to solve optimization and search problems by mimicking the principles of biological evolution, such as mutation, crossover, and selection. Genetic algorithms are part of evolutionary computing, a subfield of AI that focuses on iterative improvement of solutions to complex problems* [Science Direct].

In biology, genetics studies heredity and evolution, and in artificial intelligence, genetic algorithms simulate the process of natural selection to find optimal solutions.

Mutation *- a mutation is a permanent, heritable change in the nucleotide sequence or the process by which such a change occurs in a gene or in a chromosome* [Biology Online].

In artificial intelligence, particularly in genetic algorithms, ***mutation*** *is an operator used to maintain genetic diversity from one generation of a population to the next. It introduces random changes to the genes (parameters) of individuals in the population, allowing the algorithm to explore new areas of the solution space and avoid premature convergence to suboptimal solutions* [Geeks for Geeks].

In biology, it is a change in the genetic code. In genetic algorithms, a mutation is a random change of parameters to create new solutions.

Evolution *is defined as a change in the genetic composition of a population over successive generations* [Biology Online].

It refers to the process of improving solutions or models over successive generations using techniques inspired by biological evolution. This is typically achieved through evolutionary algorithms, such as genetic algorithms, which apply principles like selection, crossover, and mutation to evolve a population of candidate solutions toward better performance on a given task [Miriyev, Kovač, 2020].

In biology, evolution is the process of species development. In artificial intelligence, evolutionary algorithms mimic the process of natural selection to optimize solutions.

Fitness *- a competing variant's frequency is rising in relation to other competing variants in a population under the biological condition known as fitness, or the capacity to carry out a function depending on its appropriateness. Fitness refers to the condition or characteristic of being suitable, such as being in good health as in the case of physical fitness. However, here, we will focus on the definition of biological fitness* [Biology Online].

'...an evaluation function that judges how close a given solution is to the optimum' [Russel].

In biology, fitness is the body's ability to survive and reproduce. In genetic algorithms of artificial intelligence, "fitness" is a measure of how well a solution fits a task.

Clone *- a propagating population of organisms, either single cell or multicellular, derived from a single progenitor cell* [Biology Online].

In artificial intelligence, ***a clone*** *refers to a copy or replica of a model, algorithm, or agent that retains the same structure, parameters, and behavior as the original. Cloning is often used in AI to replicate successful models for further experimentation, deployment, or comparison without altering the original* [Techopedia].

In biology, it is an organism created by copying genetic material, and in neural networks, cloning can mean creating a copy of a model or data.

Immune System *- the organ system that is involved in protecting the organism from infection, infestation, and other potential harm from the presence of foreign (non-self) bodies* [Biology Online].

Artificial ***immune systems*** *(AIS) play a pivotal role in the realm of AI, leveraging the principles of biological immune systems to drive innovative solutions. In this comprehensive exploration, we delve into the core concepts of AIS, its historical evolution, significance in AI, operational mechanisms, real-world applications, pros and cons, related terms, and FAQs. By unraveling the intricacies of AIS, we aim to offer profound insights into its profound impact on AI advancements* [Lark].

The immune system in biology protects the body from infections. In artificial intelligence, immune algorithms mimic the work of the immune system to solve problems such as detecting anomalies.

Cell. *A biological cell is a membrane-bound structure that occurs as a functional independent unit of life (such as in unicellular organisms, e.g. bacteria, protozoa, etc.), or as the structural or fundamental unit in a biological tissue specialized to perform a particular function in multicellular organizations (e.g. plants and animals)* [Biology Online].

...refers to the concept of an ***AI Virtual Cell****, which is a computational model designed to simulate the behavior and dynamics of biological cells. These models use AI techniques to integrate biological data across scales and modalities, enabling predictions of cellular functions, behaviors, and responses to various conditions. AI Virtual Cells aim to facilitate in silico experiments, generate universal representations of biological entities, and provide tools for understanding and engineering cellular systems* [Bunne, Roohani, Rosen, 2024].

In biology, it is the basic unit of a living organism. In Recurrent Neural Networks, a "cell" is an element that stores and processes information.

Replication *in the general sense means to create a copy or a duplicate of something. Thus, in biology, replication is commonly associated with DNA (DNA*

replication) where the DNA is copied prior to cell division. Apart from that, replication also refers to the duplication of a laboratory or experimental procedure, which is essential for research statistics. [Biology Online].

***Replication** is a foundational concept in AI systems, particularly in distributed architectures, ensuring robustness and efficiency in data handling and computational processes* [IBM].

In biology, replication is the process of copying DNA. In AI, replication can mean copying data or models for distributed computing.

***Adaptation** - in biology and ecology, adaptation refers to the process of adjusting behavior, physiology, or structure to become more suited to an environment. It may also be defined as the state reached by the biological population undergoing adjustments or changes. It may also pertain to the trait that made the species a better fit for the environment. The trait is referred to as the adaptive trait* [Biology Online].

***Adaptation** in AI is crucial for creating more resilient, efficient, and effective systems that can operate in complex, real-world scenarios. This capability enables AI to deliver better outcomes faster and maintain relevance even as conditions change* [TechTarget].

In biology, adaptation is the process of adapting an organism to the environment, and in the discourse of artificial intelligence it refers to the ability of a system to change its behavior depending on data.

***Population** - living organizations typically prefer to live, grow, and survive in groups. Except for some species that prefer solitude – both distances away from organisms of their own species and from organisms of other species, most of the organisms on Earth prefer interlinked and interdependent lives* [Biology Online].

A group of individuals or entities whose data is analyzed or modeled using AI techniques. For example, in population health, AI is used to assess health outcomes and disparities across groups, focusing on preventive care and chronic disease management. This involves leveraging large-scale data to predict trends and improve healthcare delivery at a population level [NLM].

In biology, it is a group of organisms of the same species. In genetic algorithms, a population is a set of solutions that evolve to find the optimal outcome.

***DNA** is the material that living organizations possess that carries their genetic make-up. DNA and RNA are sometimes confused with each other. DNA is deoxyribonucleic acid whereas RNA stands for ribonucleic acid. DNA is found in every organism and in every cell of an organism. It is what makes the organism unique since no two organisms contain the same DNA* [Biology Online].

In biology, DNA is a molecule containing genetic information. In genetic algorithms of neural networks, DNA can be used as a metaphor to describe the encoding of solutions.

In conclusion, biological terms in the discourse of artificial intelligence serve not only as a tool for describing technologies, but also as a bridge between two scientific fields, contributing to their mutual enrichment. Further research in this area may lead to new discoveries both in computer science and in understanding biological processes, which undoubtedly opens up prospects for creating more complex and efficient artificial systems.

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全球品牌，本地声音：有效适应汽车广告口号的认知和话语策略
GLOBAL BRAND, LOCAL VOICE: COGNITIVE AND DISCURSIVE STRATEGIES FOR EFFECTIVE ADAPTATION OF AUTOMOTIVE ADVERTISING SLOGANS

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摘要：本文探讨了汽车广告语中运用的认知和话语策略，重点探讨了如何在统一的全球品牌形象与有效的本土文化适应之间取得平衡。通过分析来自领先国际制造商的142条广告语，本研究识别了消费者感知的关键机制和主要的话语策略——情感型、地位型和理性务实型。研究结果表明，成功的广告语如同认知捷径，在体现普世原型的同时，也针对特定市场进行符号学调适。研究得出结论，全球元素与本土元素的战略性融合是全球汽车行业成功的关键因素，并为跨文化广告调适提供了实用建议。

关键词：汽车广告语、全球品牌、本土化、认知话语分析、跨文化传播、广告调适。

Abstract. *The paper examines the cognitive and discursive strategies employed in automotive slogans, focusing on the challenge of balancing a consistent global brand identity with effective local cultural adaptation. Through an analysis of 142 slogans from leading international manufacturers, the study identifies key mechanisms of consumer perception and the primary discursive strategies—emotional, status-based, and rational-pragmatic. The findings reveal that successful slogans act as cognitive shortcuts, manifesting universal archetypes while undergoing semiotic adaptation for specific markets. The research concludes that the strategic hybridization of global and local elements is a critical factor for success in the global automotive industry and offers practical recommendations for cross-cultural advertising adaptation.*

Keywords: *automotive slogans, global branding, localization, cognitive-discursive analysis. cross-cultural communication, advertising adaptation.*

The modern automotive market represents a unique space for intercultural communication, where global brands are forced to balance between universal positioning and local adaptation. Automotive slogans, which are a concentrated expression of brand philosophy, serve as excellent material for researching cognitive and discursive strategies in the context of cross-cultural interaction. This study, based on an analysis of 142 slogans from leading international automakers, reveals the complex mechanisms through which advertising messages impact target audiences across different cultural contexts.

The effectiveness of an advertising message largely depends on its clear structure and the harmonious interaction of its components. Let's consider the key terms used in the study. According to Hristo Kaftandzhiev, the key elements of an advertising message can be identified as the headline, body copy, slogan, and visual components, each playing a specific role in the process of persuasion and memorability [1, p. 16].

The advertising text, presented in headlines, slogans, and descriptions, should be specific, clear, and persuasive. It guides the perception of visual images, ensuring they convey the intended meaning and stimulate action. Non-verbal components of advertising text include images, while verbal components include headlines, slogans, body copy, and echo phrases. This work will focus on analyzing the verbal elements.

The headline is a key element placed at the beginning, setting the tone for the entire message. As D. Ogilvy asserted, a headline is read five times more often than the body copy, underscoring its importance [2, p. 27]. A headline can be short or more elaborate but must always be emotional and understandable, instantly capturing attention.

The body copy, including an introduction and conclusion, provides detailed information about the product, its features, benefits, points of sale, and cost. In other words, the headline poses a question, and the body copy provides the answer. It offers more detailed information for consumers who need additional specifics.

Additional elements, such as comments and captions, can enhance the ad's effect. The slogan plays a significant role – a concise phrase reflecting the company's positioning and increasing the recognizability of the advertising campaign.

However, besides the headline and body copy, the echo phrase is also important; it summarizes the meaning of the advertising text, reinforcing key information in the consumer's memory. Although not mandatory, using an echo phrase improves memorability and gives the text a sense of completeness.

A slogan and an echo phrase are not identical concepts. A slogan sets the tone and identifies the brand, being its key message. An echo phrase is used at the end

of an advertising message to reinforce the effect of what has been seen or heard, fixing the main idea in the consumer's mind. An echo phrase may be based on the slogan, but its purpose is precisely to conclude and reinforce the information.

Understanding the interrelationship and functionality of these elements allows for the creation of a cohesive and effective advertising message capable of achieving set marketing goals. However, it should be noted that the internal structure of an advertising message is only one aspect determining its effectiveness. External factors, which significantly influence its form and content, are equally important.

Visual components play a significant role in advertising materials, complementing and enhancing the impact of textual information. However, despite the importance of visual design, the primary role in advertising is still played by text. As David Ogilvy noted, the pursuit of elegance and beautiful language should not be the priority. Effective advertising requires a special approach, distinct from a literary style [2, p. 22]. Complex sentences, intricate phrasing, and refined constructions may repel rather than attract potential buyers.

An advertising message is shaped by numerous factors: its communicative type, goals, target audience characteristics, and the features of the promoted product. The main task of an advertising message is to persuade the consumer of the necessity of acquiring the advertised product or service. To achieve this goal, it is necessary to provide the target audience with detailed information about the benefits and advantages of the offered product. Thus, the advertising message performs two key functions: informing and influencing.

Despite their apparent similarity, a slogan and an advertising headline are different tools performing different functions in advertising. They often overlap in their aim to attract attention and convey a key message, but their goals and scopes differ. The main distinction lies in their focus. A slogan reflects the essence of the brand, its philosophy, mission, and values. It is a constant that represents the company as a whole. An advertising headline, conversely, focuses on a specific product or service, highlighting its unique features and advantages at a certain stage of its lifecycle. It is more dynamic and tied to the current advertising campaign.

Using a slogan is not always appropriate in specific advertising communication, especially when it's necessary to convey specific product information. A slogan generalizes and unifies the company's concept, whereas an advertising headline is designed to acquaint potential clients with a specific offer and prompt them to action.

Consider this example from an advertisement by the Japanese multinational corporation and manufacturer of automobiles and motorcycles, Honda. The company's slogan is: *The Power of Dreams*. The advertising headline for the Honda Civic Type R is: *The 2024 Honda Civic Type R Makes All Your Tuner Dreams Come True* [4]. Here, the slogan *The Power of Dreams* is used as a base and is

complemented by the phrase *Made Real*, making it more meaningful and specific for this model. It can be interpreted that the Civic Type R is so good it makes dreams come true, implying its superior characteristics and capabilities. In this case, the original headline directly addresses the target audience (tuning enthusiasts) and promises the fulfillment of their desires. The variant integrating the slogan slightly softens this focus on tuning but strengthens the connection with the Honda brand. The effectiveness of each headline will depend on specific marketing goals.

Thus, the choice between using the slogan in the advertising headline or omitting it remains with the creator of the advertising campaign. However, the examples we've considered show that in most cases, creating a headline that directly addresses the product's specific benefits and its target audience is more effective. A slogan is generally more suitable for maintaining brand recognition and forming a general identity than for directly promoting individual goods or services.

Despite their different focuses, slogans and advertising headlines have much in common. Both elements serve as a kind of 'essence' of the message – advertising or news – presenting it in the most memorable form. They both strive for brevity and conciseness to attract attention quickly and be easily remembered by the audience. They should be memorable and catchy, using techniques that evoke an emotional response or intrigue. Furthermore, both the slogan and the headline must be clear and understandable so that the consumer unmistakably grasps the key message. Ultimately, both elements serve the same purpose – to persuade the consumer and increase brand or product recognition.

Cognitive Mechanisms of Automotive Slogans' Impact

When developing an advertising campaign, understanding the specifics of how an advertising message is perceived is crucial. Attention capture, information comprehension, attitude formation, and brand memorability are influenced by emotional (appealing to the consumer's feelings, emotions, and mood), cognitive (affecting the consumer's thinking and understanding), and behavioral factors (aimed at stimulating specific consumer actions).

These factors significantly influence each stage of the classic model developed in the late 19th century by Elias St. Elmo Lewis: *AIDA* (Attention - Interest - Desire - Action). Subsequently, the model was modified and took the form 'Attention - Comprehension - Evaluation - Attitude – Memory'. The scheme emphasizes that emotional involvement, formation of evaluation and attitude towards the information or product, contributes to sustainable memorization. This scheme is often used to show how advertising should sequentially engage the consumer.

Thus, we conclude that the cognitive effectiveness of automotive slogans is ensured by their ability to activate complex associative chains in the consumer's mind. Concise phrases, such as *Sheer Driving Pleasure* (BMW) [4], work on the

principle of a cognitive shortcut, instantly evoking a complex of emotional and rational associations. This phrase, consisting of just three words, sequentially passes through all stages of the AIDA model: it attracts attention through an intriguing formulation, arouses interest by promising a unique experience, creates a desire to possess through an appeal to hedonic needs, and prompts action by creating a clear behavioral setting.

As a result, a positive attitude towards BMW is formed, not just as a car manufacturer, but as a brand that provides positive emotions and experiences. The simplicity and memorability of the slogan ensure its retention in the consumer's Memory. *Sheer Driving Pleasure* becomes synonymous with the BMW brand, instantly associated with quality, dynamics, and pleasure.

The rhythmic-syntactic organization of slogans also plays a key role in their memorability and impact. Brevity, rhythmic organization, and phonetic expressiveness become key factors of cognitive effectiveness. The slogan *The Power of Dreams* (Honda) demonstrates an ideal balance between semantic richness and formal conciseness, ensuring its rapid memorization and stable reproduction across different cultural contexts.

Psycholinguistic research shows that effective slogans often use techniques like alliteration (*The Ultimate Driving Machine – BMW*), rhyme, and rhythmic patterns, which aid memorability. Furthermore, they rely on deep cognitive schemas and archetypes that are universal across cultures but allow for local adaptation. For example, the slogan *Vorsprung durch Technik* (Audi) [4] works successfully on a global scale, despite being in German, because it appeals to the universal value of technological superiority.

Thus, a well-formulated slogan can effectively work at each stage of the customer journey, shaping the desired brand perception and stimulating consumer behavior. The importance of a slogan lies in its ability to concisely and comprehensively convey the key message, evoke the desired emotions and associations, and ultimately influence the purchase decision.

Discursive Strategies in Automotive Advertising

Analysis of the material revealed three dominant discursive strategies, each actualized differently in global and local dimensions. **The emotional strategy**, represented in slogans like *Renault. Passion for Life*, appeals to universal human feelings and experiences. However, its specific implementation varies depending on the cultural context: in some markets, the emphasis is on the passion for driving pleasure, in others on the emotions of family comfort and safety.

The status strategy (*Maybach. Icons of Luxury*) is built on constructing social identity and prestige. Interestingly, the discourse of luxury is encoded differently in various cultures: in some places, exclusivity and handmade production are emphasized, in others, technological superiority and innovation. In Asian markets,

for example, the concepts of ‘perfection’ and ‘harmony’ are often accentuated, while in Western cultures, the concepts of ‘individuality’ and ‘exclusivity’ are more significant.

The rational-pragmatic strategy, particularly characteristic of Japanese brands (*Honda. Technology you can enjoy*), emphasizes technological superiority and reliability. This strategy, accounting for about 2.1% of the studied sample, appeals to cognitive schemas of rational choice and practical expediency. Interestingly, in different regions, the same rational characteristic can be presented through different discursive prisms: somewhere through engineering perfection, elsewhere through environmental friendliness, and elsewhere through economic efficiency.

Hybridization of Global and Local: The Semiotic Aspect

The most significant finding of the study was the identification of mechanisms for hybridizing global and local elements in automotive slogans. Global brands demonstrate remarkable flexibility, using universal archetypal concepts but adapting their verbalization to specific cultural contexts.

Universal concepts like ‘dreams’ (Honda), ‘freedom’ (Jeep), ‘safety’ (Volvo), and ‘driving pleasure’ (BMW) receive different semiotic packaging in different regions. “The Jeep slogan “Stand Out Among the Crowd” is a vivid example of such adaptation: in individualistic cultures, it accentuates personal uniqueness, while in collectivist cultures it can be recoded as ‘standing out through belonging to elite groups’.

Linguistic codes of adaptation include the use of culturally specific wordplay, rhythmic patterns, and phonetic symbolism. For example, in the Chinese market, international brands often use slogans based on idiomatic expressions and cultural allusions that are untranslatable into other languages but create a deep emotional resonance with the local audience.

Visual codes manifest in the selection of images, color solutions, and compositional techniques relevant to local aesthetic preferences. Thus, in advertising for the Middle Eastern market, pastel tones and smooth lines are used more frequently, while the European market is characterized by more contrasting and dynamic visual solutions. Compositional features also vary: some cultures prefer symmetry and balance, others asymmetry and dynamism.

Cultural codes touch upon deep value orientations – from attitudes towards time and space to notions of success and social status. For example, the concept of the ‘future’ in car advertising is presented differently across cultures: as technological progress, preservation of traditions, or harmony with nature. American brands often emphasize ‘conquering space’ and ‘mastering the roads’, while Japanese manufacturers highlight ‘harmony with the environment’ and ‘resource efficiency’.

Practical Application and Conclusions

To conclude, cognitive-discursive strategies in automotive slogans represent a sophisticated mechanism for balancing between global brand identity and local cultural relevance. This balance becomes a key success factor in a globalizing yet culturally heterogeneous automotive market. Understanding these mechanisms allows not only for analyzing existing communicative practices but also for forecasting the development of automotive discourse in a rapidly changing media and cultural environment. Successful automotive slogans of the future will be increasingly multidimensional and adaptive, capable of simultaneously speaking the language of global values and local cultural codes, combining emotional depth with technological precision.

Prospects for further research into the relationship between global and local trends are seen in studying the digital transformation of automotive slogans, their adaptation to new media formats, and their interaction with user-generated content on social media. A comparative analysis of the perception of the same slogans in different cultural environments using neuromarketing techniques, including eye-tracking and EEG studies of emotional response, is also of interest. Particularly relevant is researching the influence of artificial intelligence on the processes of creating and adapting advertising texts: already, neural networks can generate thousands of slogan variants optimized for specific cultural and demographic groups.

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成人仪式对灰姑娘童话情节的影响
THE INFLUENCE OF THE INITIATION RITE ON THE FAIRY TALE PLOT OF CINDERELLA

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摘要：本文致力于研究成人仪式对《灰姑娘》童话情节的影响。本文旨在分析成人仪式对《灰姑娘》情节的影响，并探讨现代小说中童话情节结构的变化。

关键词：童话情节，灰姑娘，成人仪式，童话情节的演变。

Abstract. *This paper is devoted to the study of the influence of the initiation rite on the fairy tale plot of Cinderella. The purpose of this work is to analyze the impact of the initiation rite on the plot of Cinderella and to identify the modifications occurring in the structure of the fairy tale plot we are studying in modern fiction.*

Keywords: *fairy tale plot, Cinderella, initiation rite, transformation of the fairy tale plot.*

The tale of the poor and unfortunate stepdaughter has an archaic origin and its roots go back to the distant past. There are several theories about the origin of this fairy tale plot: the mythological school suggests that it was originally based on the solar myth and Cinderella was associated with the goddess of dawn, and later the concept underwent transformations and the heroine in works on this plot is increasingly associated with the gods of rebirth and rebirth. At later stages of the plot formation, “Cinderella” in its structure often already contains ideas of witchcraft and magical abilities of the heroine, which is especially noticeable in the example of modern retellings of the fairy tale in the fantasy novel. However, despite all these changes, the central idea of the plot for many centuries was the initiation rite and its passage not only by the heroine, but also by her half-sisters or full sisters. The initiation rite was one of the significant rituals in archaic society: a girl or a boy became part of the community only if they could pass it. Therefore, one cannot fail to note the influence of this rite on the plot of Cinderella and its development over the centuries. The fairy tale of the “Cinderella” type, based on the work of Marian Roalfe Cox “Three hundred and forty-five variants. Cinderella, Catskin,

and Cap O'Rushes, abstracted and tabulated, with a discussion of medieval analogues, and notes" from 1893 and notes by Bolte and Polivka to the fairy tales of the Brothers Grimm "Anmerkungen zu den Kinder- u. Hausmärchen der Brüder Grimm" from 1913, includes in addition to the canonical story about the poor stepdaughter also such subtypes as "All-Kinds-of-Fur", "Cap O'Rushes", "Beauty and the Beast", "The Goose Girl", "One-Eye, Two-Eyes, and Three-Eyes" and "The Girl Without Hands". Andrew Lang also classifies the plot of "Puss in Boots" as a fairy tale of the "Cinderella" type, however, it is worth noting that this plot itself is more likely to border on the fairy tale plot of Cinderella than to be included in its type, although in world literature there are Cinderella heroines, whom a cat helps to cope with trials and transform.

Thus, relying on the above-mentioned subtypes of fairy tale plots included in the "Cinderella" type, we can note that all these tales tell about the transformation of the heroine, which in ancient times implied a favorable completion of the initiation rite. The entire plot of the tale is built around the idea that Cinderella must not only behave correctly with her new family and everyone around her, but also follow the instructions of the giver and observe the ritual burial of the magical assistant or his gift so that he can help the heroine undergo initiation and integrate into society.

In fairy tales like Cinderella, there are several versions of the heroine's initiation rite: staying by the hearth and keeping the fire going, working as a shepherdess, going to another kingdom in a colorful skin with or without an animal assistant. There are also versions where the heroine decides to go to the land of the dead herself to get medicine to cure her dying father, or goes after her werewolf husband, whose prohibition she inadvertently violated and therefore must undergo trials so that he returns. There are also frequent versions in which the heroine is deprived of her hands due to the slander of her mother-in-law, sometimes her stepmother, and is forced to wander the world until, thanks to a miracle, her hands are returned to her by a benevolent deity, or they are returned due to her proven innocence (most often, this motif is found in medieval versions of the Cinderella story, but is also present in the Korean fairy tale "The Stepdaughter"). Below we will look at how these options for passing the initiation rite developed in the story of Cinderella.

In the canonical version of the Cinderella story, the main character is sent to the hearth and ends up completely covered in ashes. According to the research of Vladimir Yakovlevich Propp, the motif of the hero associated with the stove and sitting in ashes "developed on the basis of the custom of burying the dead in the house" [11, p. 250], so the hero himself is thought of as a reborn ancestor. In a series of lectures, Sofia Agranovich develops the idea of the death and rebirth of heroes like Cinderella/Zolnik: the heroine is afraid to show herself to the prince

not because she is dressed in rags, but because she is dead. But this is not the death that a modern reader thinks about: as the researcher notes, primitive people "were born and died twice" [1, p. 199], and, being born a second time, they became full members of the community. Those who failed to pass the initiation rite, in an archaic society could often die during the rite itself, and in fairy tales, the negative passage of the rite is indicated to us by the fact that the false hero is either punished, or banished, or has a less fortunate fate than the protagonist who managed to correctly cope with the tasks given to him. The idea of female shamanism is also inextricably linked with the hearth and ashes. Thus, Roman Gafanovich Nazirov notes that traces of this shamanism can be seen even in the Bible in the example of the prophetess Deborah, the Aendos witch and others. However, he also points out that "female shamanism was recorded in the cult of Vesta" [5, p. 33], and the keepers of the fire kept the state hearth - the eternal fire - burning. Therefore, we can see that the plot of Cinderella and the heroine herself as the keeper of the hearth and "servant" in the ashes have a sacred role for the archaic: a connection with ancestors and the spiritual principle, which gives the opportunity for rebirth after spending a certain time in service. In the subtypes of the Cinderella plot, in which the stepmother sends her stepdaughter not to the hearth, but to graze cattle, the idea of initiation also slips through, only not through a connection with the hearth and, accordingly, with the ancestors of the house, but through a totem animal that comes to the aid of the main heroine. In such versions of the plot we are analyzing, Cinderella also often leaves her native kingdom and goes with an animal assistant to another, enduring there in the royal kitchen the same trials as the heroine of the canonical story. In some variants of this subtype of the Cinderella plot, when the help of the animal is revealed, the heroine does not leave her native kingdom: she either collects the bones of the animal-helper and it is reborn, continuing to help her, or the stepmother, noticing that her stepdaughter has not been exhausted by her work as a shepherdess, sends her to work at the hearth.

Thus, we believe that the subtype of the plot about Cinderella as a shepherdess was influenced by male initiation and the desire to more clearly outline the fact that the heroine of the tale undergoes a transformation. Thus, from Propp's research we know that it was specifically for male initiation rites that dressing in an animal skin and ritually passing through a certain structure imitating the animal's mouth was characteristic, while for female initiation, as can be seen from the research of R. G. Nazirov, E. Neumann and O. K. Yazhuk, another type of rite was characteristic, connected both with important female crafts and with physical endurance. If in male initiations it was necessary to demonstrate fortitude and physical strength, the ability to endure any pain, then female initiation was connected with patience and deprivation of the most necessary things: thus, during the rite, the girl should not complain about the lack of things for warmth, or about thirst or

hunger. Therefore, Cinderella, who dresses in an animal skin and makes her way through a forest so narrow that it seems like a mouth trying to swallow her, we consider it a clear attempt to involve the idea of male initiation into the story of Cinderella, which adds new motifs to the story and allows us to see how the fairy tale, through this change, is rebuilt from a matriarchal story into a plot formed in the era of patriarchy.

We see a clear influence of the initiation rite on the plot in the subtypes of the Cinderella tale, when the heroine decides to go to the land of the dead for medicine for her parent or for her werewolf husband. The heroine's visit to the other world and her happy return with the sought-after item is an allusion to the successful completion of the initiation rite.

Thus, we see that the Cinderella plot is closely connected with the initiation rite and its influence is noticeable in the entire structure of the tale:

1. The heroine is not despised initially, but becomes an outcast when the time comes for the initiation rite;

2. The heroine is engaged in the type of activity that is symbolically associated with the world of the dead - she is by the hearth (the habitat of the ancestors), she herd cattle (shepherds have long been associated with the other world, since cattle are usually herded on the border of the field and the forest, so the shepherds had to negotiate with the spirits of the forest);

3. The heroine undergoes a transformation - often Cinderella was originally beautiful and the modifications occur only in her outfit (rags are replaced by shiny dresses), but in some versions the sisters disfigure Cinderella and, upon completion of the trials, her beauty returns. In modern works of the fantasy genre, the idea of initiation no longer seems as relevant as before and more emphasis is placed on the idea of not so much the individual transformation of the heroine, but on the modifications of the entire kingdom in which she lives. The heroine herself, however, also feels the need for change, so initiation in modern works is presented by the idea of the heroine's transformation along with the society around her: not only she grows and develops as a person, but society must also change over time, corresponding to the changes taking place.

Thus, works of the 21st century develop a new idea in the ancient plot: sometimes not only the heroine must undergo transformations to become part of society, but society itself must change, revise old concepts and form new ones. These ideas are especially noticeable in fantasy novels, where Cinderellas appear, bringing new ideas to the kingdom – learning witchcraft and casting spells (in Miller R.'s series "The Unraveled Kingdom"), the possibility of the king's daughter inheriting the throne and her sole reign (in Pratchett T.'s novel "Witches Abroad"). Also often in novels with a plot about Cinderella, the idea is expressed that each inhabitant of the kingdom is important and valuable in their own way: thus, the

main characters are usually children of mixed races – some supernatural being or a person with magical abilities and an ordinary person (in Odette T.'s novel "The Heart of the Raven Prince" and in Summer H.'s novel "Princess of Ashes and Cinders"). Thanks to these examples, we can see how the plot of Cinderella changed: from the idea of initiation transformations and the transmission of everyday problems, the plot was transformed into a highly social one, conveying various current ideologies.

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分析哲学与社会动力学：协同学、协同作用、整合效应和统计悖论
ANALYTİCAL PHİLOSOPHY AND SOCİAL DYNAMİCS: SYNERGETİCS, SYNERGY, İNTEGRATİVE EFFECT, AND THE PARADOX OF STATİSTİCS

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注释：本文从分析哲学的角度审视当代世界的国际关系。作者尤其关注在上海合作组织（SCO）框架下，如何从历史的角度看待东方各国人民在当代关系中的作用。文章强调了东方思维方式的历史使命。所有这些都是在现代科学世界观的背景下进行研究的。作者揭示了国际关系与现代物理学中量子激光和协同学内容之间的联系。

关键词：社会动力学、协同学、统计学、悖论、整合。

Annotation. *The article examines the international relations of the modern world from the perspective of analytical philosophy. In particular, the author focuses on how, within the framework of the Shanghai Cooperation Organisation (SCO), the peoples of the East are viewed from a historical perspective in modern relations. The existence of a historical mission for the Eastern way of thinking is emphasized. All of this is researched within the context of a modern scientific worldview. The author has brought to light the connection between international relations and the quantum-laser and synergetic content of modern physics.*

Keywords: *social dynamics, synergetics, statistics, paradox, integration.*

The 20th century was, on the whole, an era of scientific revolutions. Among the fundamental scientific discoveries, perhaps the greatest was the emergence of synergetics. The synergetic approach is associated with the name of Hermann Haken (1927-2024). However, prior to his quantum-mechanical laser theory, the English neurophysiologist Charles Scott Sherrington (1857-1952) managed to draw the world's attention to the détente of interneuronal connections. C.S. Sherrington linked the physical-biological consequences of the synergetic approach to the "integrative activity" of the organism at the synapses and received the Nobel Prize (1932). Finally, it became known to science that the reflexes of the nervous system are carried out not by the specific purpose of individual organs, but by the

"integrative effect" of the organism as a whole. More precisely, the interneuronal processes in the synapses occur under the specific control of the organism. In general, not only is there no isolated organ or system in the body, but even in the entire universe there is no completely independent, "sovereign territory." All colors, all features are mixed somewhere, in something, and are forced to break their internal boundaries. All feedback, up to the laser effect converging in synergetics, and the immanent, transcendent activity of the micro- and macrocosm—everything is subject to transgression. Transgression is a very important factor for human existence. As early as 1927, P.B. Fuller (1895-1983) proceeded from a panvitalistic thought that violated the laws of classical mechanics. He constructed his famous designs by referring to synergetic feedback and ephemeralization in geometric structures.

Synergetic processes belong to complex systems, and their general operating principle is that they must possess the capacity for self-organization. In synergetics, integration, adaptation, and all stages of evolution together reflect the essence of complexity. However, complex systems always operate with an essence distinct from their constituent elements. Precisely for this reason, all multidimensional, non-linear complex processes can be explained by the synergetic approach. Although in scientific literature synergetics is sometimes accepted as an interdisciplinary connection, the intra-systemic connections of synergetics carry a more complex content. In open structures, the immanent capacity for self-organization ensures the transformation of chaos into order. This process is the emergence of the synergetic laser, due to the effect of scattering and spreading, which is the opposite of the absorption of light rays—absorption. In this process, the discovery of stimulated emission of radiation by an excited atom, leading to the creation of coherent, monochromatic laser rays with a small divergence angle, created a great revolution in science. Revealing the hidden potential within an excited atom determined how to transform chaos into harmony and order, bringing quantum mechanics to the forefront. Collecting coherent, synchronously spreading waves of the same frequency into one direction, giving them impulse and stimulus, and directing photons towards quantum-laser emission through the created pressure and emission resulted in an extraordinary outcome. This meant a shift not only for physics but, in general, for the very essence of human existence. Of course, the special type of coherent light obtained today, the laser, is used for various purposes. This is the purely scientific-physical aspect of the issue. However, besides this, in synergetics, there also exists emergence—the unexpected, sudden result of non-linear processes. Against the backdrop of all this, it is required to view synergetics as an opportunity for the self-realization of evolution and gradation. But it is the socio-philosophical aspect of synergetic approaches that draws our attention more. In fact, the very creation of unique works of art by artisans over the centuries also arose from an immanent capacity for self-organization. We can

find and trace the marks of an excited, agitated internal potential in the marvelous patterns of Eastern carpets and the mythical depictions on Chinese vases. In fact, the potential for synergetic connection in human thought has marched in step with humanity's ancient history. But it took millennia to reveal its scientific essence.

In the modern era, there is no field of science where the synergetic approach is not applied. From nature to society, there is no system whose process of understanding its structural essence is not related to synergetic connections. Since synergistic processes are universal, they are easily applicable to all dynamic systems, including society and social phenomena. All processes, from the formation of systems to their development, from adaptation to evolution, can be a research field for synergetic connections. For example, to account for the synergetic factors of social processes, all patterns of internal and external factors are kept in focus. In the science of sociology, when approaching social processes and interstate relations with synergetic content, first and foremost, the emergence of social patterns, their duration, and possibilities for change are considered. However, this approach is still not implemented as a distinct field of research. Instead, it is applied outside of a rigid framework, operating within the context of a natural evolutionary approach and simply as the centuries-old experience of social consciousness.

In public-social relations, the most universal laws where synergetics is applied manifest themselves in considering the degrees of magnitude and smallness of connections. The main issue is the correct determination of the merging and intersection points, the coordinates of these connections. As in all synergetic systems, the main direction towards which social processes and international relations are oriented aims at preserving the stability of the system. However, the fluctuations of social relations, even their smallest changes, sometimes unexpectedly disrupt the balance and create a "butterfly effect." The feedback we call the "butterfly effect" occurs as a result of the disruption of the balance between the "infinitely small (infinitesimal)" and the "infinitely large" in the system. During meteorological research, Edward Lorenz (1917-2008) determined that complex systems have a particular sensitivity to chaos and the attractor of system theory. And this sensitivity resulted in the emergence of the laser effect of the cause-and-effect relationship stretching "from Iowa to Indonesia," known as the "quantum butterfly" (1961). In seemingly orderly systems, even a slight disruption of the infinity balance each time creates spreading, dissipating chaos. Here, one cannot but agree with the thought of our philosophy teacher, S. Khalilov: "There are two kinds of infinity: One is the infinitely small, which is inside everything. And the other is the infinitely large, which contains everything within itself."

Of course, the laser effect, as a complexity and a synergetic systems theory, has generated great interest across all scientific fields. Today, the directions of synergetics that pertain to all vital areas and public-social processes give us even

more to ponder. Throughout history, humanity has lived as a complex system precisely through its internal feedback potential, and it is thanks to this potential that the unique works of art we see today have been created. Qualities such as self-organization, stimulation, and attractors belong to all norms of life. For example, psychologist Gordon Allport (1897–1967) placed special importance on stimuli in the formation of personality. Approaching personality from a dispositional perspective, Gordon Allport particularly emphasized stimuli that achieve "free autonomy" in the human psyche. He rightly believed that all structural qualities (traits) determine unique behavioral norms. That is, the dynamic activity of every personality, every form of social existence, is also its structural essence, and they are the primary guiding stimuli in their formation. The author sees the true essence of human psychology in its public-social content and scientifically substantiated the impossibility of suggestion where it is not required. Gordon Allport's ideas drew their philosophical content from the ancient Bible. It is written in the Bible: 2 Corinthians 8:12 – "For if the willingness is there, the gift is acceptable according to what one has, not according to what one does not have."

Every entity carries the truth of existence. This is not dependent on our will. Therefore, when explaining the synergetic content, Azad Mirzajanzade wrote: "According to G. Haken, the parameters of order are ultimately thoughts." Indeed, thought itself emerges as a special kind of laser effect within human cognition, yet the power of the word, of thought, is many times greater than the power of a laser. Therefore, in the social sphere, international relations on the human-to-human level can also resolve the future fate of humanity through the power of the word. Approaching international relations from a scientific-philosophical perspective allows for the correct determination of humanity's future destiny. The ability to influence international relations depends not on geographical orientation, but on scientific and philosophical worldview. Taking this into account, when selecting a common proprium in all complex systems, the "energy of the excited atom" must be chosen in accordance with a strategic position.

In social dynamics, societies are studied as carriers of public consciousness. However, when approached as a complex system, the internal and external laws of society resemble the structural essence of a complete organism. This idea can be validated by applying the scientific findings of synergetics to international relations. Furthermore, this approach creates conditions for establishing a new and distinct system of relations. Since humans are bearers of both material and spiritual elements, they embody a unity of contradictions and oppositions. Yet, this ambivalence unites the internal and external, material and spiritual, empirical and theoretical within a single chronotope, expressing a complex organic structure.

At one time, the analysis of the feeling of "esoteric attraction to space" (p. 73, 346) in Anna-Teresa Tymieniecka's phenomenological approaches caught our

attention. Here, by "space," the author did not mean a specific location but rather the abstract content of the "nesting instinct" attributed to all living beings. The "space" Anna-Teresa Tymieniecka referred to arose from a sensitive thought directing humans toward a longing for their primordial and divine homeland, and only this grand idea made it possible to see the world as a home. The esoteric space in the author's thought was a cosmological space—unified, indivisible, timeless, and rich with intimate feelings—existing for a singular world. Naturally, space is only grasped together with time; the "esoteric attraction" of space is, in fact, the attraction of the harmony that unites space with time. Wholeness and unity mark the beginning of realizing and perceiving harmony, aesthetic values, and order.

Humanity must examine worldly problems—both in internal and international relations—from a scientific-philosophical perspective. In his work *The Apotheosis of Groundlessness*, L.I. Shestov sought to substantiate the peculiar "enigma" of human thought, which is lost in the "uncertainty" (chaotic content) of the world, through various means. Ultimately, the author arrives at a point where he states: "For human thought, spirit and matter together are far too much; would it not be better if only one of them existed—either spirit or matter?" (368, p.7).

Unfortunately, the fact that humans simultaneously bear the burden of both the material and the spiritual—and the degree of this burden's weight—does not free them from the responsibility of carrying it. Humans are a complex system, and all the discovered and yet-to-be-discovered laws of complex systems also apply to them.

By the way, "Synergetics" and "synergy" are distinct concepts. The synergetic approach involves a factor of wholeness, where the "integrative effect" of the system plays a key role, whereas synergy is the combined sum of parts. This combination does not aim to alter the essence. Moreover, structures that create synergy by deviating from dynamic equilibrium exist at all times.

In social dynamics, all members of a society, along with existing public-social strata and groups, carry the typical characteristics of that society. These traits express the socio-public character of the individual. Therefore, not only individual states but also each individual as a carrier of public consciousness can be analyzed as a system. Every society itself determines the criterion of development for the individual. No matter how significant a role the individual plays as a social model in society, it is "passionarity" that can bring about the natural leaps essential for the society. The developmental traits of individuals were also aligned with the evolutionary levels of that organism. However, no emergent trait can correctly choose the direction or path of development for society.

The main goal of this article is to examine society, socio-economic relations, interstate connections, and dialogues between civilizations through the prism of the synergetic approach. Intersubjectivism brings all complex systems where sy-

nergetics is applied to the forefront of social dynamics but does not grant it special authority. Meanwhile, the "interactive effect" in the synergetic approach negates the differences between Eastern and Western thought in social dynamics and the nature of distinctions among nations. Scientific universality easily transcends all criteria.

Although all elements within a multitude carry its characteristics, any multitude is subject to specific laws in its functioning. In all systems and structures, solutions to public-social problems are analyzed as parts of a whole or elements of a multitude but are resolved through the laws of the "integrative effect". If society has determined its stage of development, there is no need for the individual to seek themselves or rely on their individual efforts. Social institutions, grounded in scientific foundations and defining the operating principles of systems through modern scientific results, should provide orientation.

We have noted the connection between the study and evaluation of social systems and psychological content. The penetration of modern psychological science into all other fields of science originates precisely from this point.

In the first half of the 20th century, the majority of sociologists believed that "sociology begins when it is determined that the 'economic man' (material man) is already considered an outdated model of humanity." However, the greatest problem of the modern era is that this prognosis has produced entirely opposite results. Today, the "economic man" has not only retained his position but has even further strengthened it. Yet it is also important to note that what the "economic man," the "material man," has lost cannot be restored by modern economics.

The world's new landscape proves that the leading role in society is determined not by isolated individuals or individually powerful states, but by public-social movements as a whole. Max Weber's model of "ideal types" no longer aligns with the evolutionary level of the new world. For modern universal values, structural clusters are purposefully constructed—or rather, unifying the world based on the most general features of the "interactive effect" has come to the forefront. The world is no longer approached as a carrier of moral values, a repository of artistic models, a precious treasure, or a potential of scientific achievements, but as an object of study for complex systems. Here, when the balance of forces is disrupted, any positive factors can turn into negative values for the world. The dialectical nature of development and evolution requires determining the median of existing processes.

There is no absolute boundary between "good" and "bad" or "positive" and "negative" anymore. In this sense, social development cannot be separated from natural development. To precisely analyze the multitude of public factors, natural processes, social functions, and all paradigms existing in the world today, statistics are essential. Statistically, elements carrying the most common features of the

multitude are selected and correlated, as in synergetic processes within a homogeneous environment. The homogeneous environment, which turns statistical data into a key indicator, is rationally chosen. Here, the average values of what exists and what is achieved are calculated. It is this average value that aims to maintain the stability and steadiness of processes and events. If that stability, balance, or equilibrium is correctly defined, society progresses at a stable development pace, eliminating the need for social leaps.

Sometimes, factors that remain overlooked can be positive indicators for a small state or a particular social group in isolation. However, they may not yield the same results for other states or social groups. It is entirely possible that a positive outcome achieved for small states may not be effective for large groups or other major states. This is because, as noted earlier, the "integrative effect" is not merely the sum of its parts. This phenomenon is known in science as **Simpson's Paradox.**

Therefore, the paradox of mathematical statistics must be kept in sharp focus in the study of social processes and sociological research. Although the part carries the characteristics of the whole, it cannot disrupt the "integrative effect" of the whole because the whole is greater than the sum of its parts. The "integrative effect" is a quality on which the resolution of all global processes and international prognoses directly depends today. In social dynamics and international relations, the paradox of mathematical statistics is acknowledged, as is the impact of global factors on global events. All this compels us to reckon with the complexity laws of social dynamics. In such comprehensive approaches, a new dimension of social and public processes emerges.

Even if complete isolation were possible when studying specific events in international relations, it would still be impossible to escape the challenge of addressing globally significant issues. Therefore, the topic of a synergetic approach to social systems must undoubtedly be incorporated into modern sociological science. Research in social dynamics makes it clear that intersubjectivism itself diminishes in significance against the backdrop of today's global challenges. Consequently, not only synergetics but even the mechanical, temporary, and purposeful combinations of synergy itself must have a scientific basis. It should also be noted that such combinations align more closely with the Western mode of thought. For Eastern thought, strategic wisdom is more characteristic.

The majority of great sociologists, particularly Herbert Spencer (1820–1903), analyzed society as a living and "evolutionary organism." Herbert Spencer and Pitirim Sorokin (1889–1968) viewed social dynamics itself as a unified force emerging from the functions of individual organs. It is also important to note that in social processes, just as the effect of integration exists, the loss due to degradation is inevitable.

Thus, the "integrative effect," which gradually manifests as the sum of national and universal dominant characteristics, gathers humanity onto a unified plane. Synergetics, however, demands a completely new perspective on the modern world, international relations, and global problems—with new mathematical measures and new critical values.

Yes, the discussion has centered on how the synergetic approach seeped from Eastern thought and underwent a long historical journey before gaining a scientific foundation in Western thought. In ancient Indian culture, the "whole was considered greater than the sum of parts." The idea of the "whole possessing an integrative effect" in Indian philosophy was grounded in fundamental principles. Humanity's early experiences in this field were based on the cumulation of knowledge, giving rise to foundational Eastern culture. This cumulation gradually gathered all kinds of ideas and thoughts into human consciousness—from initial religious teachings to lunar and solar concepts, and even animistic imaginings. How the Tree of Life, plant reliefs, and mythical depictions in Eastern culture are generalized through scientific-empirical thought still appears enigmatic. The synergetic content of Eastern artistry—geometric, artistic, and botanical depictions, as well as the astonishing concept of "Bi thinking (breaking free from binary thinking) "—is only now becoming clear in its essence.

It is very likely that when Hegel spoke of the "spirit of world culture," he was referring to the general content of this "integrative effect." Today, it is inevitable that countries of the world follow Eastern thought. Eastern countries and Eastern culture must take on the restorative mission of spirituality.

In the article, the author explains and compares two important sociological concepts. Both concepts play a significant role in sociology. The author notes that in the analysis of public-social phenomena, special attention must be paid to them. Integration has led society to modern globalization. The varying results of mathematical statistics across different groups must be taken into account.

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文化产业：哲学讨论中的概念形成
CULTURAL INDUSTRIES: CONCEPT FORMATION IN PHILOSOPHICAL DISCUSSIONS

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注释：本文探讨了“文化产业”概念在20世纪社会文化变革背景下的起源与演变。作者分析了该概念在法兰克福学派批判理论中的起源、其在后工业社会中的演变及其对经济和政治进程的影响。特别关注当代文化产业中技术与连续性的相互作用，以及它们在塑造大众文化和价值观方面的作用。本文强调文化产业是克服社会、经济和文化危机的有效工具。作者最后指出，该概念的发展与后工业时代文化和哲学的演变密切相关。

关键词：文化产业，法兰克福学派，批判理论，后工业社会，创意产业，技术与文化，社会文化转型，文化政策。

Annotation. *This article examines the genesis and transformation of the concept of “cultural industries” in the context of sociocultural changes of the 20th century. The author analyzes the origins of this concept in the critical theory of the Frankfurt School, its evolution in post-industrial society, and its impact on economic and political processes. Particular attention is paid to the interaction of technology and continuity in contemporary cultural industries, as well as their role in shaping popular culture and values. It emphasizes that cultural industries are an effective tool for overcoming social, economic, and cultural crises. The author concludes by noting the close connection between the development of this concept and the evolution of culture and philosophy in the post-industrial era.*

Keywords: *cultural industries, Frankfurt School, critical theory, post-industrial society, creative industries, technology and culture, socio-cultural transformations, cultural policy.*

In the context of the rapidly evolving sociocultural reality of the modern era, the problem of the genesis of the concept of cultural industries is acquiring particular relevance for cultural studies, as well as for addressing its origins for critical understanding and identifying its transformations in the context of the evolution

of socio-philosophical thought. Given the growing interest in this phenomenon, its integration into economic and political processes, as well as its fundamental significance for state cultural policy and strategic planning, the need for a philosophical understanding of its ontological and epistemological foundations is becoming evident [4]. As contemporary epistemology notes, the study of knowledge dynamics in this area requires a comprehensive approach that takes into account both historical preconditions and contemporary challenges posed by globalization and digitalization.

The development of the concept of cultural industries is a complex and multifaceted process, rooted in the historical dynamics of socioeconomic transformations and the evolution of 20th-century philosophical thought. By the late 1950s, an analysis of the process of cultural growth gave rise to the emerging trend of "cultural industries." Historically, the term "cultural industries" was inspired by the critical thought of the Frankfurt School, specifically by Theodor Adorno and Max Horkheimer's seminal work, Dialectic of Enlightenment (1947).

Initially, the concept, imbued with a distinctly polemical connotation, was used to refer to artifacts reproduced through technological processes, thus delineating the conflict between the spheres of culture and economics. Within the critical paradigm, emphasis was placed on the destructive potential of the "culture industry" (as a holistic phenomenon), the denial of its value-orienting function, the erosion of spiritual enrichment and enlightenment, and the dominance of the commercial component. Scholars were the first to draw attention to the standardization and commercialization of cultural production under the conditions of late capitalism. The influence of structuralist and poststructuralist philosophy on understanding the role of language, discourse, and power in the construction of cultural meanings and identities is examined, which is directly relevant to the analysis of the processes of production and consumption of cultural products. It is worth noting that "…the technology of the culture industry was transformed into a phenomenon of standardization and serial production, and what had always distinguished the logic of a work of art from the logic of a social system was sacrificed" [1, p. 151].

Within the framework of this approach, cultural industries are presented as an instrument of comprehensive control over the individual and society, personifying the victory of technological thinking "...by generating false needs, the cultural industry turns the consumer into a passive layman, indifferent even to his own economic situation, no matter how difficult it may be" [5].

In the context of post-industrial dialogue (D. Bell), which emerged following the strengthening of industrial approaches in economics and culture, an understanding of cultural and creative processes emerged, giving rise to two fundamental brand concepts: "cultural industries" and "creative industries." Processes of transformation act as a driving force: cultural activity and economic reality under-

go immanent changes under the influence of creativity. This shift is expressed in the transformation of subjectivity and the increased agency of creative practices—creative activity ceases to be merely a tool of production and becomes a source of "symbolic capital," defining new epistemological and normative parameters for development. Ultimately, a model emerges in which axiological guidelines are integrated into the economic system, defining the ultimate goal of the cultural and economic development of an information society and a society of networked structures (M. Castells). This process entails a rethinking of established paradigms and requires the development of new methodological approaches capable of adequately reflecting the dynamics of cultural production and consumption.

The second half of the 20th century was marked by the acceleration of the cultural industry. Ontologically and normatively, this signified the transformation of aesthetic-symbolic practices into an economic component of reality, giving rise to problems of commodification, market performativity, and the need for an interdisciplinary methodology for their analysis and regulation [2].

A central issue for contemporary cultural industries is the interplay of technology and continuity. In their 2014 paper, "Learning for Organizational Practice in the Cultural Industries," Joseph Lampel, Teresa Lunt, and Jamal Shamsie identify five key dilemmas shaping organizational approaches in this field. They argue that "...it is necessary to embrace the confluence of artistic value with the commercial success of mass entertainment. It is also important to strive for uniqueness in products that differentiate them from similar products in their niche. Successful product introduction requires analysis and consideration of existing demand. Organizations must balance the benefits of vertical integration with the preservation of creative energy through flexible specialization. Finally, it is necessary to create support systems for cultural products without allowing these systems to stifle the creative inspiration that is the foundation of the industry."

Cultural industries are understood as the institutionalized, commercialized mass production of cultural goods and services, ensuring the representation and circulation of symbolic forms in material and spiritual realms. This is an activity-technological phenomenon in which economic productivity is integrated with the creation of symbolic capital: the product is simultaneously a market commodity and a bearer of cultural semantics. Due to the performativity of the processes of production and diffusion, such industries influence urban practices and restructure social ontology – shaping tastes, fashions, ideals, and constructing social idols. This phenomenon should be analyzed through the categories of institutionalization, semiotic representation, and the hegemony of meaning. The contemporary world is characterized by the widespread phenomenon of cultural industries, viewed as an effective tool for overcoming social, economic, and cultural crises. Policies for the formation and development of cultural industries are implemented

at various levels: by regions, states, international corporations, and global organizations. The influence of this phenomenon is acquiring an inter-industry character, demonstrating its multicomponent nature [3].

Thus, the development of the concept of cultural industries is closely linked to the evolution of contemporary culture. The post-industrial era allows us to overcome the contradictions inherent in this concept by changing the very nature of cultural and creative labor. This, in turn, stimulates the growth of cultural industries, where information and knowledge play a decisive role. Creativity and creativity become the driving force of production. The philosophical and ontological roots of these concepts lie in technical innovations that have facilitated labor, made mass production and distribution possible, and thus predetermined the emergence of new forms of creative and cultural activity.

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对现代性和后现代性的主要特征进行哲学、文化和历史分析
PHILOSOPHICAL, CULTURAL, AND HISTORICAL ANALYSIS OF THE MAIN CHARACTERISTICS OF MODERNITY AND POSTMODERNITY

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注释：现代性和后现代性的关键哲学、文化和哲学历史特征已被识别，代表了人类进化的两个关键阶段。对现代性和后现代性关键特征进行哲学、文化和哲学历史分析，将有助于更深入地理解文化的变迁，以及这两个时期如何影响当代文化发展的动力。

关键词：现代主义、后现代主义、叙事、文化、进步、元叙事、动力。

Annotation. *The key philosophical, cultural, and philosophical-historical characteristics of modernity and postmodernity have been identified, representing two key stages in human evolution. This philosophical, cultural, and philosophical-historical analysis of the key characteristics of modernity and postmodernity will allow for a deeper understanding of the transformations that occurred in culture and how these two periods influenced the dynamics of contemporary cultural development.*

Keywords: *modernism, postmodernism, narrative, culture, progress, metanarrative, dynamics.*

Modernity and modernity (from the Latin modernus – modern) represent a complex characteristic of European society and culture. Today, this term is increasingly used in philosophical and sociological theoretical frameworks to describe the formation and development of industrial society, which is replacing traditional systems. In 20th-century philosophical discourse, modernity is often associated with the dominance of scientific rationality, characteristic of the industrial era. It is associated with liberation from the absolute power of tradition and authority, ensuring freedom of choice and opinion, as well as the dynamics of social change and the presence of strict norms, the violation of which leads to the loss of social status.

Chronologically, modernism is considered in two main aspects: the first, spanning approximately two centuries and known as the Age of Reason, began in the

18th century with the French Revolution, marking the emergence of a capitalist, industrial society. The beginning of modernism dates back even earlier, to the mid-17th century, when the concept of a future society began to take shape. Modernism encompasses both the modern and contemporary periods, broadening the understanding of modernity.

It was in the mid-17th century that Francis Bacon and Roman Descartes, considered pioneers of modernism, set a goal for humanity: to become "master and lord of nature" through science. This marked the beginning of an era of transformation and conquest of nature, based on a scientific approach. Descartes developed a rationalist concept, shaping the ideals and values of Western civilization. He argued that reason and science, not religion, should serve as the foundation of culture. The 17th century was marked by the rapid growth of science, the first scientific revolution, and the emergence of scientific and technological progress, which played a fateful role [5].

These earlier trends were further developed in the 18th century, known as the Age of Enlightenment. Enlightenment philosophers, primarily French, further emphasized the importance of reason and science, reviving Renaissance humanism. They developed a concept of a new society based on universal principles such as freedom, equality, justice, and progress. A key aspect of this concept was futurism, which signified a radical break with the past and aspirations for a "bright future" where these ideals would manifest themselves. Interestingly, the leaders of the French Revolution (Maximilian Robespierre, Charles-Jacques Romme, Jean-Jacques Danton), emphasizing the sharp break with their predecessors (absolute monarchy, high clergy), declared 1793 the first year of a "new era." Enlightenment and education became the primary means for shaping a new society and achieving a progressive future, with reason being accorded a decisive role in human development and improvement. The Enlightenment philosophers presented their modernist program as complete.

The 19th century marked the period when Enlightenment ideals began to be realized. However, from the very beginning of the century, it became obvious that bourgeois-capitalist society was at odds with many of the values on which it was founded. By mid-century, Marxism emerged, proposing a proletarian path to realizing Enlightenment ideals, emphasizing radical and revolutionary methods (the violent overthrow of the existing order, the dictatorship of the proletariat).

Within the framework of modernity, a new concept of individualism is established. The individual becomes the central figure upon which society is oriented. The emergence of new socio-economic conditions, such as urbanization and capitalism, supports this process. Ideas about the freedom and autonomy of the individual become the basis of philosophical reflections, which subsequently influence the forms of social life. In his work "Leviathan," Thomas Hobbes writes:

"The liberty of subjects consists only in those things which the sovereign, in regulating their actions, has passed over in silence; as the liberty to buy and sell, and otherwise to make contracts with one another, to choose their own residence, food, manner of living, to educate their children as they please, and the like" [4, p. 143]. This also leads to the alienation of individuals from one another. The relationship between people becomes more complex, which in turn gives rise to a feeling of loneliness and social isolation. Descartes, in his concept (from the Latin - "thinking thing"), highlights the absence of essence as his own characteristic [5]. After all, what is this immaterial thinking substance of the soul, inherent in all rational beings, including humans, if not "Nothing" itself, understood as an essence.

The concept of progress becomes the driving force of modernism. Society begins to believe that humanity can improve its lives through advances in science and technology. In his work "Man Machine," J.-O. La Mettrie views man as a machine subject to the laws of physics and chemistry [8]. However, he emphasizes the uniqueness of the human personality and its capacity for self-improvement. He believes that the development of science and technology will help people become more perfect. In a purely philosophical sense, modernism embraces the idea of utopian thinking, where all problems can be solved, if not now, then in the near future. However, utopian notions of progress call into question society's ability to solve all problems, which in turn leads to criticism of the modernist approach and its ultimate goals.

Modernity, in its ideological and spiritual sense, is related to modernism, which can be considered in a broader context, extending beyond traditional modernist and avant-garde art. From this perspective, G.W.F. Hegel was a progressive and modernist, acknowledging the development of reason. K. Marx, meanwhile, emerged as the most consistent progressive and modernist. Schopenhauer, on the contrary, leaned toward conservatism, as he disbelieved in progress and was pessimistic about the future. He can even be considered a precursor of postmodernism. Friedrich Nietzsche, on the other hand, embodied both modernism and postmodernism. The modernity we observe today has postmodern characteristics, such as a disillusionment with reason and a lack of faith in the future. Therefore, J. Habermas rightly calls prominent postmodernists such as M. Foucault and J. Derrida neoconservatives, who, in his view, differ from traditional conservatives in their anarchic stance. In general, the New and Contemporary Times best correspond to the criteria of modernism [11].

Postmodernism, as a reaction to modernism, is a complex construct that emerged in the second half of the 20th century and brought about significant changes in the perception of individuals and society, as well as a rethinking of the meaning of previous concepts. Postmodernism, at its core, implies a shift in social dynamics, one that departs from modernism in favor of a new society. While

awareness of this shift exists, this does not mean that such a transition has already occurred [1].

In the first volume of A Study of History, published in 1934, the renowned historian A. Toynbee expressed the opinion that postmodernist tendencies began to develop as early as the end of the 11th century [10]. He believed that during this period, nationalism and industrialization ceased to be exclusively Western phenomena and began to spread to other regions of the world. Toynbee's conclusions boiled down to the loss of relevance of the concept of civilization, which he used to describe human development. In the longer term, the future of the planet could only be saved by a new universal religion, which would be syncretic in nature [10].

Postmodernism manifested itself in a variety of forms and interpretations until 1979, when the first scholarly work examining postmodernism as a philosophical category was published, J.F. Lyotard's landmark work, The Postmodern Condition [9]. In this work, J.F. Lyotard postulated a concept that denotes a revolutionary change in all aspects of human existence. J.F. Lyotard, perhaps a little ahead of his time, proclaimed the end of metanarratives—large and rigid constructs such as Christianity, racism, colonialism, and other all-encompassing ideologies [9].

The idea that humanity is entering a new era began to be discussed as early as the 1970s. For example, J.F. Lyotard, in his work "The Postmodern Condition," mentions the crisis of "metanarratives" [9]. He notes that past cultures had grand stories that shaped human understanding of themselves and the world. In other words, every culture had a powerful worldview framework rooted in language. These metastories were always perceived as legitimate, representing the truth for the bearers of a given culture. In traditional European society, this was the Christian metanarrative. In modern European culture, it is the ideals of reason and progress, which together create the Modern project. Contemporary society has become skeptical of metanarratives; after two world wars, faith in science and progress weakened, and people became more inclined to micronarratives—small stories that help maintain the integrity of life at the level of primary communities. According to J.F. Lyotard, the postmodern era is characterized by the fragmentation and rapid transformation of identities. New positions are emerging that underpin modern self-awareness: gender identity, racial and ethnic characteristics, and individual psychological characteristics [9]. This emergence of new identities characterizes postmodernity as a unique stage in the development of philosophical thought, where the emphasis shifts from universalism to pluralism and individuality, paving the way for a more multifaceted and complex understanding of human existence.

It should be emphasized that postmodernism in philosophy developed against the backdrop of a trend that emerged as a result of the "linguistic turn" that occurred in Western thought in the first half of the 20th century. This turn manifested

itself most clearly in neopositivism and later evolved into hermeneutics and structuralism. Thus, postmodern philosophy is divided into two main branches—poststructuralism and hermeneutics—with the most significant influence coming from Friedrich Nietzsche, Max Heidegger, and Ludwig Wittgenstein.

Postmodernism recreates many aspects of contemporary culture and emphasizes the problem of the subject, placing culture at the center of attention despite its anticentric nature. This movement stands in opposition to the preceding modernist worldview. The second half of the 20th century, shaped by a certain specificity of culture and philosophical thought, is reflected in the works of Jean Lacan, Robert Barthes, Jean Deleuze, Marc Foucault, Jean Derrida, and Robert Rothrie. For postmodernists, concepts such as "God," "Soul," "Self," and "External World," which constitute the foundation of existence, were discarded, demoting the Idea as the primary cause. Adherents of postmodernism reject the idea of a single, central world, dividing it into numerous fragments without stable connections. They criticize the category of being as the "ultimate foundation," replacing it with language as the only knowable existence. Postmodernism questions the concept of truth and rethinks knowledge, rejecting scientism and emphasizing agnosticism. The attitude toward humans as subjects is also criticized, leading to a rejection of traditional anthropocentric positions.

Let us emphasize that postmodernism, which rebelled against clear boundaries and structures, contrasts modernity with its own impermanence and relativity. It emphasizes fragmentation and indifference to "met narratives" (grand narratives) and discusses the deconstruction of fundamental notions of knowledge and truth. Postmodern culture is characterized by paradox, irrationality, and an ironic approach to the legacy of previous eras.

One of the key characteristics of postmodernism is skepticism toward absolute truths and bodies of knowledge. Instead of a single truth, postmodernism considers a multitude of perspectives, allowing different cultures and approaches to coexist. This creates a pluralism of thought and ideas, engendering dialogue between different cultures and philosophical systems. This skepticism also applies to methods of scientific inquiry. A number of postmodern thinkers, such as Michel Foucault and Jean-Baptiste Derrida, criticize ideas of neutral knowledge and emphasize the influence of power and language on the formation of knowledge.

Another key feature of postmodernism is the idea of simulation. Postmodern culture often focuses on representations and images that may be far removed from true reality. This view can be traced through the works of authors such as Jean Baudrillard, who argues that modern society has retreated into a world of simulations and copies that replace the original [3]. Postmodern thought strives for subversiveness, questioning traditional social and cultural boundaries.

Postmodernism emerged against the backdrop of Western countries' transition to a post-industrial society, focusing attention on information and the production

of signs rather than goods. It demonstrates contemporary views of the world and the place of the subject within it. Many researchers (G. Deleuze, F. Guattari), analyzing the current state of culture, direct their attention to postmodernist traditions that promote the textualization of cultural space, rhizomatization, and decentralization. One of the most important distinguishing features of postmodernism is the use of the "rhizome principle," which was introduced into philosophy in 1976 by G. Deleuze [6]. This leads to so-called "oversaturation" of culture, the leveling of individuality and subjectivity, the freedom to choose value orientations, and the blurring of boundaries between various forms, as well as between the real and virtual worlds.

In 1984, American philosopher F. Jameson published his essay "Postmodernism: The Cultural Logic of Capitalism" [7]. F. Jameson, who began his career as a literary scholar, focused his attention on the cultural side of postmodernity, that is, on postmodernist discourse. He linked the emergence of postmodernity with the transformation of capital and identified the emergence of "postmodernity" in the early 1970s. This was a time when capital merged with global relations, encompassing even remote countries, migration movements intensified, and taboos on expressing the identity of marginalized communities (homosexuals, feminists, etc.) were lost; heavy industries were relocated to third countries, and the level of prosperity reached unprecedented levels. In this context, knowledge became a substitute for physical labor, which created the economic basis of postmodernity. F. Jameson characterized the cultural side of postmodernism as a global nomination of the "North American style" [7]. While modernism presupposed complex relationships between center and periphery, the presence of local "beacons of power" defending their spheres of influence, as postmodernism evolved, its decentralization became increasingly apparent—it dissolved into existing institutions and social relations. Thus, the traditional source of evil became inaccessible; targets for criticism or opposition simply did not exist.

We are in a period of change, as evidenced by the diverse views of researchers on contemporary cultural forms. It is noteworthy that Jürgen Habermas believes that the era of modernity is still ongoing, while D. Frisby sees postmodernity as a development of modernist tendencies. W. Grasskamp views modernity as a meta-era, encompassing all cultural periods. Conversely, J. Vattimo emphasizes a shift in research paradigms, and W. Welsh identifies new cultural characteristics. Some scholars, such as N. Mankovskaya, suggest the emergence of post-postmodernism. Despite these differing opinions, a paradigm shift in cultural consciousness is observed, moving from technical and economic decisions to a spiritual and cultural context.

However, it's worth emphasizing that not everyone agrees with the concepts of postmodernity and postmodernism. For example, the German philosopher Jürgen

Habermas, one of the main critics of postmodernism, argues that ideas about the emergence of some kind of postmodern stage lack any other basis. He believes that "modernity is an unfinished project." According to him, it has already yielded positive results and still has potential for further development. Only corrections of errors and refinements of the original concept are necessary [11].

The transition to a post-industrial society, marked by an emphasis on information and signs, introduces new social dynamics and alters the role of the individual in society. In contemporary cultural discourse, postmodernism is often viewed as a spiritual condition characterized by a multitude of fragments and micronarratives that help maintain the coherence of life.

Postmodern culture is characterized by hyper-contextuality, where various spheres of life interpenetrate, transforming traditional notions of the subject and society. In this context, the artist becomes not simply a creator but rather an assembler, using the "patches" of other cultural traditions to create original works. Postmodernism, as a reaction to modernism, focuses on the problem of identity, which becomes fluid and contextual. Overall, postmodernism appears contradictory and paradoxical, representing a transitional period, successfully dismantling outdated elements of the past, although its positive contribution remains limited. Some of its features are likely to persist in the culture of the new century.

However, proponents of postmodernism offer their own, no fewer compelling arguments and examples, although there is no complete agreement among them on their interpretation of postmodernism. Some tend to see postmodernism as a specific spiritual state, which tends to emerge in various historical periods at their final stages. In this context, postmodernism appears as a transcontextual phenomenon. Given all the differences, one commonality can be found between these perspectives: postmodernism can indeed be recognized as a state of mind, enduring long enough to be called an era, albeit a transitional one.

Thus, modernity and postmodernity are two key stages in human development, characterized by philosophical and cultural paradigms. Modernity, which emerged during the Enlightenment, emphasizes rationalism, scientific progress, and individualism. It emphasizes belief in objective truths and universal values, reflecting a desire to improve the human condition and an inspiration for transforming the world through knowledge. However, modernity has faced criticism: some of its ideas, such as linear progress and absolute truths, are questioned in postmodernity.

This is why modernity and postmodernity represent two key eras in human development, each shaped by specific philosophical and cultural contexts. Modernity is marked by a desire for rationalization, scientific discovery, and the affirmation of individualism. Postmodernity, on the other hand, which developed in the first half of the 20th century, was a response to the crisis of modernist dogma. Its key characteristics are the deconstruction of traditional narratives, pluralism,

and openness to diverse interpretations. Postmodernity rejects the idea of a single truth, instead proposing a mosaic of meanings and contextuality. This is reflected in both philosophy and art, which often employ irony, parody, and play with genres.

Now that we've examined the key characteristics of modernity and postmodernity, the question arises of how these two periods are interconnected. Postmodernity cannot be seen solely as a rejection of modernity; rather, it is a complex reaction to modernist ideas, leading to a profound rethinking of them. The transition from modernity to postmodernity is linked to the assertion that if humanity continues to follow the laws and principles of modernity, seeking to increase its influence on the world and intensively exploiting it, it could threaten the existence of our planet. However, defining a clear boundary between cultural eras is impossible until that boundary is crossed.

In conclusion, modernity and postmodernity represent complex and contradictory phenomena in human development. Postmodernism as a phenomenon is both correlated and contrasted with modernity, and therefore the key to understanding it lies in the latter. Postmodernity is not simply a rejection of modernist ideas, but a complex reaction that leads to a profound rethinking of their meaning. This transition reflects a broader shift in cultural consciousness, where spiritual and cultural orientations predominate, and progress is perceived as a qualitative transformation, not simply quantitative growth.

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卢甘斯克人民共和国教育领域残疾人和健康问题人士的个性化教育
INDIVIDUALIZATION OF EDUCATION FOR PERSONS WITH DISABILITIES AND HEALTH PROBLEMS IN THE EDUCATIONAL SPACE OF THE LUGANSK PEOPLE'S REPUBLIC

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摘要：本文探讨了在卢甘斯克人民共和国（LPR）高等教育体系构建的背景下，为残疾学生设计和实施个性化教育路径（IER）的当前问题。文中探讨了创建包容性环境的监管、组织、教学和资源方面的问题。分析了战后时期的具体挑战，并提出了一种融合学术、康复和社会要素的个性化教育路径模式。

关键词：个性化教育路径（IER）、残疾学生、包容性教育、卢甘斯克人民共和国（LPR）的教育空间、无障碍环境、特殊教育条件、大学的包容性环境。

Abstract. *The article is devoted to the current problem of designing and implementing individual educational routes (IER) for students with disabilities in the context of the formation of the higher education system of the Luhansk People's Republic (LPR). The regulatory, organizational, pedagogical and resource aspects of creating an inclusive environment are considered. Specific challenges of the post-war period are analyzed and an IER model is proposed that integrates academic, rehabilitation and social components.*

Keywords: *Individual educational route (IER), students with disabilities, inclusive education, educational space of the Luhansk People's Republic (LPR), accessible environment, special educational conditions, inclusive environment of the university.*

The formation of a modern, accessible and high-quality educational space is a strategic task of the Luhansk People's Republic. Of particular importance is ensuring equal opportunities for obtaining higher education for people with disabilities [1]. The consequences of military actions have caused serious damage to

the infrastructure and social sphere, exacerbating the barriers faced by people with disabilities, the number of which has increased. Former schoolchildren who have endured all the hardships of military actions, who grew up in chronic stress, and who have psychological disorders and physical health problems enter universities. In the process of university education, the design of effective individual educational routes (IER) becomes not just a pedagogical technology, but a necessary condition for the implementation of the constitutional rights of LPR citizens to education and a key element in the humanization and modernization of the educational system of the republic.

The article aims to develop conceptual and practical foundations for designing IER for students with disabilities and disabilities, taking into account the realities and potential of the emerging educational space of the Luhansk People's Republic.

Let us consider the educational space of the LPR in the context of inclusion. Inclusion as a way of organizing the education of children and young people with disabilities and limited health opportunities is recognized by the entire world community as the most humane, therefore it has become one of the leading strategies in educational policy. The works of S.K. Bondyreva, T.A. Dobrovolskaya and N.B. Shabalina, D.V. Zaitsev, N.I. Skok, D.V. Shamsutdinova, E.R. Yarskaya-Smirnova [1] are devoted to the general problems of integration of persons with disabilities into society. Their works focus not so much on the difficulties caused by physical limitations, but on the issues arising from the special social and cultural position of the individual. The main emphasis is on the socio-cultural status of a person, and not on the limitations that he or she faces in everyday life. Having analyzed the existing problem field, we determined the current state and challenges associated with the implementation of an inclusive approach in the emerging educational space of the Luhansk People's Republic. We have identified the following challenges: the consequences of the conflict - the destruction of the infrastructure of universities, a shortage of personnel (including support specialists - defectologists, psychologists, tutors), psychological traumatization of the population, economic difficulties; the regulatory framework is in the process of formation (there is a need to develop and adopt our own laws and by-laws that would regulate inclusive education at all levels in detail, in line with international standards (UN Convention on the Rights of Persons with Disabilities) and adapted to local conditions); resource constraints – financial difficulties, lack of modern equipment, adapted teaching materials, accessible architectural environment in most educational institutions of various levels; lack of experience and competence – limited experience of systematic organization of inclusive higher education in the previous period; need for large-scale retraining of the teaching staff (TPS) to implement an inclusive approach.

Based on the analysis of challenges, we talk about the existing potential and opportunities in our conditions to qualitatively organize the process of inclusive

education in the modern educational space: adaptation of infrastructure, work on the restoration and reconstruction of buildings taking into account the requirements of accessibility in accordance with all existing regulatory documents in Russia.

In our opinion, interdepartmental cooperation is a key task, the implementation of which provides opportunities for cooperation between universities with social protection agencies, health care, public organizations of disabled people operating in the territory of the Lugansk People's Republic.

Scientific and pedagogical potential is a challenge without which the development of inclusive education is impossible. Let's consider the concept of "pedagogical potential". Dictionary definition: "potential (from Latin potentia - power) is sources, opportunities, means, reserves that can be used to solve any problem, achieve a certain goal; the capabilities of an individual, society, the state in a certain area" [4]. Thus, to characterize the development potential of the university and, in particular, its pedagogical potential, it is necessary to identify the existing opportunities - sources and means that have not yet been realized, but can be realized under certain necessary and sufficient conditions, they also need to be identified and then created. In our context, this is the presence in the universities of the Luhansk People's Republic of specialists ready to master and implement inclusive practices, their developed inclusive competence, the possibility of attracting experts from friendly regions and countries to exchange experience. Currently, in domestic education there are different approaches to understanding the individual educational route, various classifications and models are presented. An individual educational route is defined by Russian scientists as a purposefully designed differentiated educational program that provides the student with the position of the subject of choice, development and implementation of the educational program with the implementation of pedagogical support for his self-determination and self-realization by teachers (S.V. Vorobyova, M.V. Dovydova, Labunskaya, V.V. Lorenz, S.V. Markova, V.G. Ryndak, A.P. Tryapitsyna, Yu.F. Timofeeva and others) [2].

Researchers state that the content of an individual educational route is always determined by the educational and psychosocial needs, individual abilities and capabilities of the student (level of readiness to master the program), as well as existing standards of educational content [2].

Let us consider in detail the essential components of the individual educational route (IER) of a student with disabilities. IER is a personalized trajectory of learning and support for a student with disabilities, developed on the basis of a comprehensive assessment of his special educational needs, potential and limitations. The purpose of IER is to ensure successful mastering of the educational program, professional development and social integration in the conditions of a university

and modern society [3]. Based on the goal, we developed the structure of IER, represented by target, diagnostic, resource, assessment and regulatory, technological and content blocks.

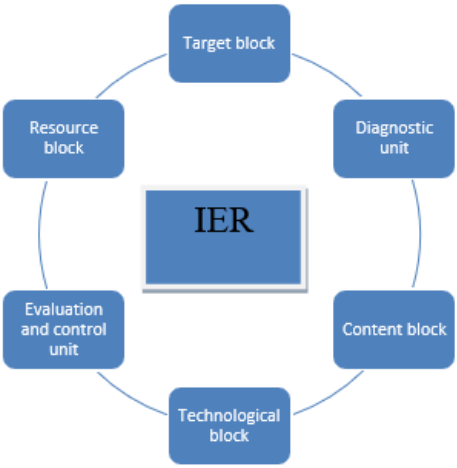

Figure 1. *IER structure*

1. Diagnostic block: comprehensive assessment (medical-psychological-pedagogical commission/university council) – health status, specifics of nosology, psychophysical characteristics, educational request, level of training, zone of proximal development.

2. Target block: individual educational goals (academic, compensatory, rehabilitation, social adaptation), agreed upon with the student and his legal representatives (if necessary).

3. Content block: adaptation of the main educational program (OOP) – selection of disciplines, adjustment of content, forms and terms of training. Inclusion of correctional-developmental, rehabilitation and health-preserving modules (physical therapy, classes with a psychologist, speech therapist, biofeedback training, training in the use of TSR). Social and psychological support (tutoring, mentoring, psychological support, assistance in social adaptation).

4. Technological block: selection and adaptation of pedagogical technologies, methods, forms of training and control (distance technologies, electronic educational resources (EER), visualization, alternative communication, individual consultations, flexible deadlines for submitting assignments).

5. Resource block: provision of the necessary conditions for the learning process itself - a) material and technical: adapted workplace, specialized software

and hardware, TSR, accessible environment; b) personnel: trained teaching staff, tutors, assistants, psychologists, defectologists, social workers, medical personnel; c) information: adapted textbooks, teaching aids, accessible EER.

6. Evaluation and regulatory block: monitoring the dynamics of student development, success in mastering the EER, adjusting the route based on the results of feedback and changing needs.

Polupan K.L. states that designing an individual route for a student is a complex, multifaceted process that determines the efficiency of the university and implements the strategic objective of higher education - improving its quality and competitiveness [5].

We include the following conceptual foundations in the conceptual and practical foundations of designing an individual route for an individual student: philosophy and principles. The design of an individual route for an individual student is based on a deep understanding of a student as a unique individual, and not just a set of diagnoses [5].

Key conceptual provisions include: a humanistic approach (recognition of the value of each person, their right to education and development. The focus shifts from limitations to the strengths and capabilities of the student); inclusion in the university (creation of an educational environment for the university, where students with disabilities and disabilities study together with their peers without limitations, receiving the necessary support; an individual route for an individual student is a tool that ensures successful inclusion); individualization (recognition that each student is unique, has their own characteristics, needs, pace of learning and interests. An individual route for an individual student is based on a deep understanding of these individual characteristics); active participation of the student and his/her family (designing an IER is not a one-way process. It is important to involve the student (as much as possible) and his/her legal representatives in defining goals, choosing methods and assessing progress); interdisciplinary approach (effective design of an IER requires joint work of specialists: teachers, psychologists, defectologists, speech therapists, medical workers, social workers and others); flexibility and adaptability (an IER is not a static document. It should be regularly reviewed and adjusted depending on changes in the student's condition, his/her progress and new educational tasks); accessibility (all components of the IER - from teaching materials to assessment methods - should be available to the student, taking into account his/her characteristics). Designing an IEM is a complex but noble work that requires deep knowledge, patience and dedication from specialists. An effective IER is not just a formal document, but a living tool that helps students with disabilities to realize their potential, achieve educational goals and become full-fledged members of society. Successful design of IER requires continuous learning, sharing of experiences and striving for improvement. It is

important to remember that each student is a unique individual, and IER should be adapted to their individual needs and capabilities. Only then can we create an inclusive educational environment where each student can realize their potential.

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俄语作为外语教师的教学方法与测试技能的相互联系
INTERCONNECTION OF METHODOLOGICAL AND TESTOLOGICAL SKILLS OF A TEACHER OF RUSSIAN AS A FOREIGN LANGUAGE

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摘要：俄语作为外语教师的专业能力包含方法论和测试论两个方面。作者指出了两者的统一性，并比较了两者内容之间的相似性。

必须摒弃将测试视为另一种简单的知识控制方法的传统狭隘观念。现代方法将测试视为一种成熟的教育工具，帮助组织复习和巩固先前学习内容的过程，培养必要的技能，并提高整体语言水平。

控制、教学和培养是测试的主要功能，有助于增强学生对最终结果的责任感。各种测试类型适用于学习的每个阶段，有助于诊断学习进度并调整后续工作。高质量的测试设计取决于对测试目的的清晰理解以及与课程材料的一致性。不同形式的测试任务可以成功地融入日常教学实践中，从而改善远程学习的组织。特别要注意培养学生在完成开放式作业（口语、写作）时识别和分类错误的能力。这些技能对于每一位俄语作为外语教学的专家来说都是必不可少的。

关键词：俄语作为外语；专业资格；测试学；教学方法。

Abstract. *The professional competence of a teacher of Russian as a foreign language includes methodological and testological components. The author notes their unity, draws parallels between their content.*

It is essential to abandon the traditional narrow perception of tests as just another simple method of knowledge control. Modern approaches regard testing as a full-fledged educational tool helping organize the process of reviewing and consolidating previously studied material, develop necessary skills, and enhance overall language proficiency.

Control, teaching, and upbringing emerge as primary functions of tests, contributing to increased student responsibility for ultimate outcomes. A variety of test types find application at every stage of learning, facilitating diagnosis of progress and adjustment of subsequent efforts. High-quality test design depends on clear understanding of purpose and alignment with course materials. Different formats of test tasks can successfully be incorporated into daily teaching practice, improving

the organization of distance learning. Particular attention is given to cultivating the ability to recognize and classify errors committed by students when performing open-type assignments (speaking, writing). These skills are indispensable for every specialist in teaching Russian as a foreign language.

Keywords: *Russian as a foreign language; professional qualification; testology; teaching methodology.*

In recent decades, special attention has been paid to introducing testing procedures into the teaching of Russian as a foreign language. Specialized educational manuals are being published, among which notable works include publications by N. M. Balykhina [1], A. N. Kireytsova [3], and O. A. Lazareva [4]. The Russian education system actively borrowed from foreign experience in assessing language proficiency, supplementing it with unique national approaches to teaching and assessment. This synergy has become a vital element of the Russian educational environment.

Among the mandatory components of a teacher's competence are not only linguistic, socio-cultural, and psychological elements but also specialized methodological and testological competences. Both components constitute a single entity and require obligatory acquaintance with different levels of language proficiency, state testing systems, legal regulations, and instructions.

To emphasize the importance of integrating these competences, many leading universities have introduced specific courses focused on studying the basic principles of linguodidactic testing. For example, Southern Federal University offers a separate module devoted to this direction. Similar courses have been designed and implemented in several other higher education institutions, including Kazan Federal University, Novosibirsk State Pedagogical University, Ulyanovsk State Pedagogical University, and Chechen State Pedagogical University.

Experience shows that incorporating linguodidactic testing into the daily practice of teachers substantially increases teaching quality and improves student performance. It is necessary for teachers to take a comprehensive approach to evaluating student accomplishments, abandoning the outdated view of tests as merely one form of final assessment. Instead, testing is regarded as an efficient instrument for continuously tracking students' progress.

It is possible to identify several important points confirming the deep relationship between methodological and testological competences.

Among the functions of tests, emphasis is placed not only on controlling (one of the main ones known since school days) but also on educating, which contributes to organizing repetition and consolidation of study material, deepening knowledge and skills, and performing an educational role aimed at instilling a sense of responsibility for one's own results. Finally, taking account of organi-

zational and managerial functions is important for teachers—exams and exams increasingly conducted in test form, where test results judge not only the level of students' knowledge but also the abilities of the educator.

Classification of tests correlates with the organization of the educational process. When discussing types of tests according to their temporal orientation, note their appropriateness at all stages of classwork (current control—during explanation and consolidation of material, checking understanding of listened-to or read text; intermediate control—upon completing sections or themes, etc.). In addition to standardized tests (which actually assess achieving a certain level of language proficiency), unstandardized tests are utilized in the educational process, whose specifications are usually determined by the instructor depending on the task they face. Here, the instructor themselves determines what part of the curriculum needs to be reinforced using diverse forms of test assignments.

The structure of the state test in Russian as a foreign language strictly corresponds to the content of communicative competence expected upon completion: knowledge of linguistic phenomena and skills in all four types of speech activities correspond to five subtests of standardized measurement instruments.

Quality characteristics of tests apply equally well to compiling other training materials. Thus, speaking about validity as correspondence between content and objectives set before tests implies the same requirement regarding selection of educational texts, audiovisual materials—both topically and lexically, comprehensively covering the required scope. Other test characteristics (practicality, cost-effectiveness) are also relevant to the overall educational process and its organizational tools.

An essential skill for each tester is the ability to detect and classify mistakes made during informal subtests (writing and speaking). Typically, problems arise concerning adequate evaluation of formed skills in these types of speech activity regardless of whether productive skills are assessed via test form or otherwise. An expert in Russian as a foreign language must know how to classify errors (formally-linguistic, communicatively meaningful, communicatively meaningless, logical, etc.) and prevent them.

Acquaintance with features of linguodidactic testing entails compulsory study of different forms of test tasks (closed form, correct-sequence arrangement, match-making, open form). Such tasks do not belong exclusively to standardized assessment materials for official testing. They may and should be employed in day-to-day teaching practice. Clearly defined requirements make transferring them into a digital (computer-based) format especially important in light of the current prevalence of remote learning. Having experience designing tasks and knowing what pitfalls to avoid, even beginning teachers can easily digitize testing procedures using existing platforms (for example, Microsoft Forms, Moodle, etc.).

Of course, grading open-format tasks (subtests Writing and Speaking) generally cannot proceed without involvement of the tester, though passing these tests remains feasible over telecommunication networks.

Primary documentation regulating testing consists of standards (requirements), programs, minimal lexicons, and typical tests. On the basis of this very documentation, most modern textbooks are compiled. Educational processes today are impossible without coordinating with requirements corresponding to six levels of language proficiency.

Requirements imposed directly on testers typically relate to the general professional profile of a teacher because they are mostly identical: objectivity; compliance with moral and legal norms and societal expectations; respect for students' rights; politeness and restraint in public evaluations; confidentiality of results; responsibility for maintaining university authority. Developing testological competence primarily occurs through further training programs, which are usually implemented by departments within major universities responsible for training specialists in Russian as a foreign language.

There exist numerous extralinguistic factors influencing testing success. They mirror those affecting education broadly: external contextual data in test materials; personal-psychological traits of participants; ethical issues; motivational influences. Therefore, methodological competence enriched by a testological component enables teachers to more deeply analyze successes and failures of their pupils, improve teaching strategies, and achieve better results.

Thus, the modern conception of preparing a teacher of Russian as a foreign language relies on integrating traditional teaching methods with cutting-edge testing technologies, forming a highly qualified specialist ready to address any challenge in the educational sphere.

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西欧史学中的民族大迁徙问题。史学基本理论与概念
THE PROBLEM OF THE GREAT MIGRATION OF PEOPLES IN WESTERN EUROPEAN HISTORICAL SCIENCE. BASIC HISTORIOGRAPHICAL THEORIES AND CONCEPTS

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摘要：民族大迁徙是西欧古代史和中世纪早期史学文献中最具争议的问题之一。尽管许多史学研究将其视为人类历史上的一个独特现象，但与此同时，尚未对日耳曼、斯拉夫和突厥三个主要民族构成进行详细的、回顾性的、历史性的分析。

因此，本文将探讨西欧史学界在民族大迁徙问题及其主要概念方面的研究现状。

关键词：西欧史学，民族大迁徙。

Abstract. *One of the most controversial issues in Western European historical literature of ancient history and the early Middle Ages of Western Europe is the theme of the Great Migration of Peoples, since many historical studies have been written on its history as a unique phenomenon in the history of mankind, but at the same time, a detailed, retrospective and historical analysis has not been built on all three main ethnic components: the Germanic, Slavic and Turkic question.*

Therefore, in this article we will consider the current state of Western European historiography on the problem of the Great Migration of Peoples and the main concepts.

Keywords: *Western European historiography, Great Migration of Peoples.*

The study of the problem of the Great Migration of Peoples was formed at the dawn of European historical science, but the most careful attention to it is characteristic of the historiography of modern times. Researchers and historians have paid special attention to the 3rd - 4th centuries, when, during the Great Migration of Peoples, barbarian tribes came into direct contact with the Roman Empire and Byzantium. However, initially, attention to the topic of the Great Migration of Peoples and the spread of barbarian tribes arose in the context of studying the

problem of the fall of the Roman Empire. For example, the English historian E. Gibbon briefly narrates about the spread of the German-Gothic ethnic group, which was an integral part of the state of Ermanaric in the 4th century [3]. With the beginning of the 19th century, in the era of romantic nationalism, in line with the research of historians from Germany, the study of the history of the Great Migration of Peoples begins. The first researchers K. Zeiss and G. Pfahler created the prerequisites for a detailed analysis of the information of ancient authors about barbarian peoples, and at the same time a geographical definition of the concepts of the Tervingi and Greutungi, known to Ammianus, with the Visigoths and Ostrogoths of Jordan [1].

Western European historiography of the 19th century had a significant influence on the establishment and formation of facts on the history of the great migration of peoples of the 3rd - 4th centuries.

The main place in European historiography was occupied by the theme of determining the ethnocultural place of the ancient Germanic, Hunnic and Slavic tribes within the framework of world history and their role in the great migration of peoples. On the basis of multifaceted historical material and monuments of written tradition, such researchers as E. Wietersheim, F. Dahn, G. Siebel, V. G. Niebuhr, R. Palman, B. Rappaport, K. Zeuss created a multifaceted picture of the spread of the Germanic and Gothic tribes, and their clashes with the Roman Empire and Byzantium. The focus of European historiography was on the spread of Christianity among the peoples of the ancient Germanic ethnic group, and the analysis of specific events related to the Ostrogoths, Visigoths, Crimean Goths, and Tetraxite Goths [6].

A number of studies by historians in the 19th century showed national tendencies to varying degrees, which consisted of the ideological role of the barbarian peoples of the Great Migration and their role in the confrontation with Rome and Byzantium [6]. For example, B. Rappaport interpreted information from ancient authors about the penetration of the Roman Empire into the Danube and Asia Minor territories as the influence of only the Gothic ethnic group. The key influence on the formation of ideas about the history of the Great Migration of Peoples within the framework of the German and Gothic question is the work of F. Lot [1]. He studies the Germanic peoples in the most detail, while the settlement of the Slavs is analyzed briefly. In the chapter on the Huns he focused mainly on political history. There are only isolated mentions of the Avars in the Slavic part of the work.

In the last third of the 19th century, the prerequisites for the development of archaeological science were born, an amorphous illusion was created that the multifaceted use of archaeological material would not only compensate in one way or another for some of the nuances of the written tradition of Western European historiography, but would also provide historical research with a more materialized

character. It was predicted that the study of barbarian peoples on the ethnic map of Europe would form a new impetus, but here scientists were faced with a paradoxical fact: it was the development of archaeological knowledge that largely determined the crisis in the study of the theme of the great migration of peoples. At the turn of the 19th and 20th centuries, the attention of historians and archaeologists was riveted to the study of monuments of the Chernyakhov archaeological culture. In German historiography, a concept appeared that interpreted the monuments of the Chernyakhov culture as elements of the dominance of the German-Gothic population in Eastern Europe in the 4th century. It was first presented in the research of the famous German archaeologist and specialist in prehistory Paul Reinecke [6]. Thus, the idea of the Germanic character of the monuments of the Chernyakhov type was the basis that created various hypotheses that were aimed at criticizing the theory of the Slavic origin of culture.

In the creation of a unified concept on the history of the great migration of peoples in the 20th century, the main role, as is known, was played by German historical science. Contemporary political doctrine, in particular, the ideological propaganda of fascism, had a significant influence on historians in Germany. The written tradition of the great migration of peoples within the framework of the German and Gothic question was especially used to justify Germany's occupation of the states of Eastern Europe and the USSR and their domination over the Slavic and other peoples. In the works of German historians, Simferopol was transformed into Gothenburg (the city of the Goths), and the city of Sevastopol into Theodorichaven (Theodoric's harbor). The peculiar approach to the written tradition of German researchers ultimately determined that the concept of the history of the great migration of peoples was formed on the ideas of Gothicism and extreme Germanocentrism. It was presented in most detail in the works of the famous German researcher Ludwig Schmidt [6].

The main historical work of Ludwig Schmidt "The History of the Ancient Germanic Tribes to the Completion of the Migration of Peoples". The basis of his deep research were the works of German historians and philologists K. Müllenhof, B. Rappaport, M. Schönfeld, A. Gutschmid, K. Platner, T. Greenberg. The historian created a study that for a long time remained the standard of historical science on the topic of the great migration of peoples.

This phenomenal phenomenon is due not only to the concept of this author, which is acceptable for German studies, in which the role of the German and Gothic ethnic group in the history of the great migration of peoples was repeatedly idealized, but also to a significant extent to the fact that this historical study remained a unique work, which provided a multifaceted analysis of the written history of the great migration of peoples.

The concept of the famous German historian Ludwig Schmidt had a huge impact on the formation of stereotypical ideas about the importance of written tradition for studying the history of the great migration of peoples. After the research, representatives of historical thought E. Schwartz, H. Reinert, E. Ochsenshtern, H. Gelbling, K.K. Klein, K. Erhardt, K. Pagh and many others set the task of establishing and describing new factology based on the written tradition, which in the future developed the historical and ethnographic concept of the history of the great migration of peoples by Schmidt. According to the famous historian Leopold Rank, the priority is the creation of a unified historical study, which is subsequently transformed into a fundamental, for many historians, work on the topic of the great migration of peoples.

In Western European historical literature in the last third of the 60s of the twentieth century, the point of view regarding the great migration of peoples was firmly established. According to this theory, barbarian tribes at the beginning of the 3rd century and before the penetration of the Huns in the 4th century spread to the territory of the Don and the Carpathians. They played a significant role in both political and cultural history. Within the framework of the ideological bias of Western European historiography, in studies on the topic of the great migration of peoples, a clarification of the chronological canvas of events associated with the Goths was built, their relationships with the autochthonous tribes were specified. At the same time, it is worth noting that studies periodically appear in which historical prerequisites are formed for identifying the system of ideas of the late Roman world about barbarian peoples [6].

In the 1960s - 1970s, a new stage in the study of the problem of the great migration of peoples begins. Particular attention should be paid to the monograph of the West German historian Norbert Wagner [6]. First of all, the author's attention is drawn to the northern period of the study of the great migration of peoples. The most relevant issue in Norbert's work is the routes of distribution of barbarian tribes, including the Gothic ethnic group, from north to south. In historical literature, determining the areas of settlement of tribes in the Northern Black Sea region after their penetration to the south is one of the most difficult tasks.

The historian from Germany interpreted the idea of using the Vistula-Western Bug-Dniester or Vistula-Western Bug-Southern Bug trade routes during the settlement of tribes. The historian determines the areas of settlement of heterogeneous tribes on the continent, he notes that the Tervingi first appeared in the area of modern Riga. The second wave were the Greuthungi, who spread to the mouth of the Neman. At the end of the third wave, the Gepids appeared at the mouth of the Vistula. Wagner's merit is the systematic development of modern German studies in the question of the formation of the names Tervingi and Greuthungi. He dwells in detail on the various etymologies of these names, clearly demonstrating their

connections with the regions that were their historical ancestral home. Wagner's works are closely connected not only with the research of the Swedish scholar Joseph Svennung, who studied the northern period of the history of the great migration of peoples, but also with his contemporaries, classicists, medievalists, Germanists and linguists A. Alföldi, K.K. Klein, H. Rosenfeld, W. Krause, F. Altheim, and F. Behn.

A significant contribution to the development of the issue of the great migration of peoples was the numerous studies of the English historian Edward Thompson. His research is distinguished by a deeply professional methodology in the analysis of written information [6]. He uses information from Byzantine church historians Socrates Scholasticus, Sozomen, Philostorgius, Theodoret of Cyrus, church figures Athanasius of Alexandria, John Chrysostom, bishops Auxentius of Dorostol and Maximinus. He considers the main source material "Getica" of Jordan, "Chronicle" and "Church History of Cassiodorus", "Chronicle" and "History of the Goths" of Isidore of Seville.

The problem of the great migration of peoples within the framework of the German and Gothic question in the post-war years is actively studied by representatives of archaeological science. As the German archaeologist Rolf Hachmann noted, in the study of the issue of the great migration of peoples, the development of this multi-faceted problem is an eternal discussion in historical science [6]. The book of the famous archaeologist Rolf Hachmann "The Great Migration of Peoples and Scandinavia" became innovative. He set the task of examining the problem of the great migration in a complex of historical - philological - archaeological approaches.

In the 1950 - 1960s, the famous Austrian medievalist, historian, and emeritus professor of medieval history and auxiliary historical sciences at the University of Vienna and former director of the Institute of Austrian Historical Research Herwig Wolfram formed a holistic picture of the history of the great migration of peoples [6].

The research of the Austrian historian is distinguished by a new methodological approach, he analyzes the history of the great migration in the plane of historical ethnography. Following the famous German historian Ludwig Schmidt, the history of the spread of the Hunnic, Germanic and Slavic peoples is developed and interpreted mainly as a political history. Wolfram consistently analyzes it as a change in the stages of the ethnogenesis of tribes. One of the innovative aspects of Wolfram's research line is the author's creation of a single history of the great migration of peoples. The Austrian historian studied the ethnogenesis of the history of the peoples of the early European Middle Ages, and on the basis of archeology, linguistics, and ethnological theory, considers three periods in the history of the great migration of peoples. The first stage is the formation of heterogeneous

tribes of the Germanic, Gothic and Slavic ethnic groups before the penetration of the Huns into the territory of modern Western Europe; this stage in Western European historiography is dated to 238-376. The second stage is the dominance of the Gothic, Germanic and Slavic people on the territory of the Byzantine Empire, this stage in historical science is dated to 376 - 418 years. The third stage of the author of Austrian historical thought includes the history of the Visigothic and Ostrogothic states.

It should be noted that another innovative study by Wolfram "Goths. From the origins to the middle of the 6th century" [2]. The book is a fundamental study of the ethnic and political history of the famous people of the Goths. The author, the famous Austrian medievalist and barbarologist Herwig Wolfram, sets out the history of the Goths from the legendary era, when the Gothic ethnic group was formed in Scandinavia and to the threshold of the early Middle Ages, when in the middle of the 6th century the most famous Gothic state - the Italian kingdom, weakened under the influence of the Byzantine Emperor Justinian. The book presents not only the original history, but also examines the problems of social structure, political institutions, ethnic history and cultural development among the Gothic peoples. The main advantage of his research is that the author was the first to draw the attention of researchers to the problem of the internal development of barbarian tribes, and raised the question of studying the history of the great migration of peoples within the framework of historical ethnography.

In Western European historiography of German thought on the topic of the great migration of peoples, the most interesting study is the monograph of the famous German historian Dietrich Klaude "History of the Visigoths", published by him in the 1970s [4]. The author of the study on the history of barbarian peoples stands on the foundations of German historiography, which is based, in turn, on the Nordic theory of the origin of the Goths. Dietrich Klaude examines in the most detailed and meticulous manner the spread of the Visigoths on the territory of the Roman Empire and their establishment on the territory of Spain.

Another monographic study in the field of German historical science on the history of the great migration of peoples is the book of the famous German historian Hans-Joachim Diesner "The Kingdom of the Vandals. Rise and Fall" [5]. The author analyzes in detail the history of the formation of the Vandal state, which became a key moment in the decline of the Western Roman Empire, and the prerequisites for the creation of the Greco-Roman civilization model, closely associated with the adoption of Arianism within the Orthodox Church.

The study of the German scientist Hans-Joachim Diesner analyzes in detail the emergence of the Vandal kingdom in the first third of the 5th century, and its dominance on the political map of medieval Europe. This topic, little studied in Soviet and Russian historiography, has created many discussions in historical

science. After the fall of the Western Roman Empire, the question arose of how realistic was the picture created by Roman writers and historians, and why did the name Vandals become synonymous with barbarism?

From this point on, Disner begins to examine many controversial issues related to the Great Migration of Peoples in general and the Vandal Kingdom in particular.

Conclusion

Thus, in Western European historiography, primarily in Germany, France and other European countries, the study of the problem of the Great Migration of Peoples has seen an ideologisation of the role of the ancient Germanic ethnos in Europe, while in Russian historiography they have disappeared from Eastern European history.

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“文化”一词的指称和意义方面
REFERENTIAL AND SENSE ASPECTS OF THE TERM “CULTURE”

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摘要：本文分析了“文化”一词的指称和意义层面。文章认为，“文化”概念的内容可以用不同的定义来表达。然而，定义的差异可能意味着被定义的术语在意义（概念）和指称层面上的差异。因此，需要不断进行分析，以澄清和完善文化认知理论研究的术语和概念框架。

关键词：文化，术语，指称，意义，概念，定义，文化认知。

Abstract. *The article analyzes referential and sense aspects of the term “culture”. It is argued that the content of the concept “culture” can be expressed in various definitions. However, differences in definitions can mean differences in both sense (conceptual) and referential aspects of the term being defined. That is why constant analytical work is needed to clarify and improve the terminological and conceptual framework of theoretical research in culturological cognition.*

Keywords: *culture, term, referent, sense, concept, definition, culturological cognition.*

The word “culture” as an element of natural language is not identical to the term “culture” of the theoretical language of culturological cognition, since culturological cognition is not a collection of ordinary people’s arguments about life, but a special kind of theoretical representation of the essence of human existence.

Natural language words translated into Russian as *«культура»* (“culture”) denote several different referents:

1) cultivation as a quality acquired by a person in the process of socialization, upbringing, training;

2) the degree of socialization, upbringing, training, education, i.e. the level of development of social, non-biological qualities of a person;

3) differences in morals, customs, beliefs, crafts, economic and family life patterns, products of artistic creation, etc. of diverse human communities;

4) art.

Whatever the patterns of language development that led to the use of the same word to denote such different phenomena, it is obvious that linguistics is not related to the study of the essence of each of the referents of the word “culture” or to the knowledge of those features of these referents, which were designated by the same word “culture”. By itself, listing the meanings of a word in a natural language cannot ensure the substantive unity of culturological research.

Any linguistic (verbal) expression of the concept of “culture” is not identical to the concept itself, which is a mental, logical image of the essence of the object under study. Only a thorough analysis of the term “culture” will help to separate the linguistic features of its application from the content of the concept that it expresses.

Yet, if we turn to the analysis of the meanings of the term “culture” that exist in culturological knowledge, we will find hundreds of definitions of this term [6].

The question arises: why is the presence of an arbitrarily large list of meanings of the word “culture” perceived in culturological knowledge as a manifestation of a variety of conceptual approaches (the sense aspect of meaning), and not as a manifestation of homonymy, in which the same word denotes different objects (the referential aspect of meaning) [5]?

It would seem that the presence of various referents indicates that we are dealing with homonymy, as, for example, in the case of the word *«коса»* (“braid”), which means at least three objects in Russian: a tool, a woman’s hairstyle and the configuration of the coastline. However, if the different contexts of the word *«коса»* (“braid”) exclude confusion of meanings for everyone who speaks Russian, then something exactly the opposite happens with the word “culture”: despite the infinite variety of those phenomena of reality that are designated by the word “culture”, all speakers are sure that they are talking about the same object [1].

On what basis is it concluded that those who talk about art, food consumption norms, or rituals describe the same object designated by the term “culture”? Is not it more logical to assume that the word “culture”, like the word *«коса»* (“braid”), is used in different referential meanings, i.e. it means different objects? How can we know that we are talking about the same object (referent)? What can be pointed out when talking about the meaning of the term “culture” [2]?

If we treat the term “culture” in the same way as natural language words or natural science terms and try to point to individual objects or show a video recording of certain human actions, then instead of the referent of the term “culture” we will get an endless series of referents of words such as “house”, “cart”, “computer”, “dance”, “ritual”, etc. [3].

What does it mean when the term “culture” is introduced to refer to all these and countless other subjects and actions? If it means that everything listed in the definitions is not created by nature, but by man, or is his own activity, then why

are there hundreds (!) definitions of the term "culture" instead of a single definition: "culture is everything that is created by man"? Perhaps because "everything" cannot be the subject of knowledge, and each of the sciences identifies in "everything" only a well-defined fragment, the knowledge of which is carried out by well-defined means and methods? For example, representatives of technical sciences study tools and vehicles, art historians study works of art, ethnographers study clothes, utensils and rituals, etc. And each branch of knowledge introduces its own definition of the fragment of culture that is studied.

However, there is a violation of the laws and rules of logic, which prohibits the identification of the general with the particular. This means that if "culture is everything that is created by man", then no single product or a whole class of products of human activity is "everything". Tools, vehicles, clothing, utensils, works of art, rituals, etc. are "themselves", but not something else and not "all" at once.

Since the sense aspect of the meaning of the theoretical term is the concept of the studied object of reality, expressed in the definition, it can be concluded that each of the definitions of the term "culture" claims to reveal the essence of the designated referent: art, customs, economic activities, rituals, etc. In other words, if the term "culture" is defined as "everything that is created by man", or as "symbolic human activity", or as "a way of mastering the world by man", then it means exactly that and only that, which is by the definition [4].

Undoubtedly, any term can be used in different meanings. The only question is, what is the methodological significance of such usage, and most importantly: what gives reason to believe that, using the term in different and arbitrary meanings, we continue to discuss the features of the same object/referent?

Thus, no matter from which side – linguistic or epistemological – we approach the word/ term "culture", it turns out that the multitude of meanings of the word "culture" and the multitude of definitions of the theoretical term "culture" indicate that one and the same word/term "culture" denotes different objects of reality.

In theoretical cognition, each concept has a well-defined area of representation, i.e. it is a mental model of a well-defined fragment of cognizable reality, and each scientific term has a well-defined area of meaning. That is why there are no synonyms in theoretical knowledge. On the contrary, cases of using the same term to refer to different socio-cultural phenomena indicate either an erroneous use of terms or the absence of a well-formed concept.

The analysis of those objects that are the referents of the term "culture" shows that all these objects have something in common, intuitively perceived by both ordinary and theoretical consciousness and designated by the word/term "culture".

First of all, let's pay attention to the fact that there are no definitions of culture that would include references to natural phenomena that are not created by man and are not the result of his activities. In fact, all known definitions of culture ex-

press the same idea in different words, namely: the world of culture is a man-made world, or a world of "second nature", in which everything, every object, every work is created by man himself, who transformed the material of the "first nature" in accordance with his own needs and interests.

It can be assumed that the definition of "culture" as "everything that is created by man" highlights precisely this common property of everything that is not the result of the development of nature, namely, the property of "creation" of various objects, actions, relationships, etc. by man himself. But in this case, the referent of the term "culture" should not be individual objects, products or actions, but rather the "creation" of all these phenomena by man.

If we assume that the real object of cultural scientists' research is the quality of "creation" inherent in some phenomena of extra-natural reality, then we face the following research questions:

1) Who created these phenomena (objects, products, works, etc.)?
2) What goals were pursued in the creation process?
3) What meanings were put into what was being created?
4) By what methods and means were these phenomena created?
5) What knowledge was used in the creation process?
6) What standards did the creators follow? Etc.

By answering these and many other questions, we will obtain a theoretical model of human existence that reflects the diversity of ways of life of various human communities and individuals living in different natural and social conditions, speaking different languages, possessing different skills, knowledge, beliefs and creating unique material and spiritual products/ works.

If we now return to the lexical meanings of the word "culture", we will see that behind the differences of the referents there is a sense unity that reflects, at the level of ordinary consciousness and common sense, not only the creation of phenomena of an unnatural reality, but also the sensually perceived differences between people as creators of phenomena of a man-made, unnatural world.

Cognition of any object begins with the study of the external, sensually perceived side and only gradually moves to a deeper, hidden from direct perception level. The essence of a cognizable object is never perceived directly by the senses. The essence as the most general, stable, and necessary base of cognizable object is reflected only in the products of thought – concepts, judgments, and conclusions.

The analysis of various definitions of the term "culture" allows us to trace the real movement of cognition and various approaches to understanding the essence of the reality under study.

No matter which arbitrary list of definitions of culture we take, each of them contains definitions that express not verbal, but sense (conceptual) differences in the interpretation of "creation" as a common term for all definitions of the referent "culture".

In some definitions, "creation" is understood as the result of a person's spiritual activity, while relevant "cultural" are considered only ideal products that exist in such forms of social consciousness as religion, philosophy, morality, science, and art. In other definitions, "creation" is understood as the result of not only spiritual, but also material and practical activities, and therefore the concept of "culture" includes both spiritual and material products.

There are also definitions that associate the quality of "creation" not with the results /products of human activity, material or spiritual, but with the characteristics of the person himself, with his inherent abilities, skills, views, etc. In the definitions of this group, cultural products do not appear at all, and conceptual differences relate to which of the features, the abilities, skills, or qualities of a person are the most essential determining factors in the interpretation of the concept of "culture". Thus, in some definitions, a person's ability to adapt to the world around him is highlighted; in others, the ability to transform this world; in some definitions, the ability to make sense or symbolic activity appears as the main human abilities.

Having analyzed many of the most common definitions of the term "culture", we come to the conclusion that there is no sufficient reason for the term "culture" to refer to each individually or even the totality of the results, types or means of human activity listed in the definitions. On the contrary, whenever the term "culture" is introduced to denote various types of human activity or infinitely diverse products of activity, it carries information about human life that is not identical to the content of the terms "totality of results", "society", "spiritual life", "art", "symbolic activity", "social regulation", etc.

Whatever linguistic forms our definitions of culture may take, the reality that is reflected in the concept of "culture" and designated by the term "culture" is a set of specific features of creative, productive activities of people.

If people did not differ from each other in their deeds, thoughts, or created things, then the concept of "society" would be sufficient to describe human life. However, social life actually exists in various forms generated by various subjects of activity who explore the world in different ways in different natural and social conditions.

To reflect the totality of these differences, the concept of "culture" is introduced. In any context, "culture" remains a concept that differentiates individuals and human communities according to the method, nature, and specific features of creative and productive activities.

Thus, the concept of "culture" (which is the sense aspect of the term "culture") displays the most general and essential features of a well-defined type of reality (which is the referent of the term "culture"), namely: a special way of mastering the world inherent in individual human communities and individuals and integral to their existence.

The content of the concept “culture” can be expressed in various definitions. However, it must be remembered that differences in definitions themselves can mean differences in both sense (conceptual) and referential aspects of the term being defined. That is why constant analytical work is needed to clarify and improve the terminological and conceptual framework of theoretical research in culturological cognition.

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