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# ACTUAL ISSUES OF MODERN SCIENCE

GLOBAL SCIENCES IN THE NAME OF HUMAN DEVELOPMENT

# **EUROPEAN SCIENTIFIC E-JOURNAL**

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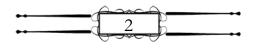
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### ACTUAL ISSUES OF MODERN SCIENCE

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## Development of a complex of sciences on cultural heritage based on the formation of documentation about it and its economic effectiveness [/]

Abstract: Cultural heritage is of great importance for raising new generations in respect of world and national history. No state can talk about any values when there is no purposeful education of specialists in the field of cultural heritage in the country. This is especially true for those countries where cultural heritage dates back many centuries, for example, many countries in Europe, Asia and America. The novelty of this research lies in the fact that the author examines the scientific complex of cultural heritage through the prism of accumulated documentary experience and economic potential. The study object is the world and national cultural heritage. The study subject is a complex of sciences on cultural heritage. The study aims to analyse the structure of cultural heritage sciences based on its relevance in creating an educational complex for future specialists in cultural heritage. Logical, analytical, comparative and historical methods were used to achieve the purpose of the study and solve the developed tasks. The study used UNESCO and ICOMOS documentation, as well as research materials from experts in cultural heritage and the author of the article. The authors conclude that the fact of forming documentation on cultural heritage in the basic international organizations - UNESCO, ISO and ICOMOS - and the economic efficiency of cultural heritage, enshrined in the ISO standards, make it possible to move on to forming a complex of sciences that will aim to produce specialists engaged in various fields of conserving existing objects, itemss and elements of cultural heritage and the formation of a basis for preserving existing and currently created objects, items and elements that meet the requirements of preservation for future generations. The complex of Klironomy, or the sciences of cultural heritage, will provide a unique scientific look at the principles and traditions of preserving what will be of fundamental importance for future generations.

Keywords: klironomy, cultural heritage, unesco, icomos, iso standarts, science of cultural heritage.

#### Abbreviations:

CRM is Conceptual Reference Model, ICOMOS is International Council on Monuments and Sites, ISO is International Organization for Standardization, OUV is Outstanding Universal Value.

#### Introduction

Cultural heritage is of great importance for raising new generations in respect of world and national history. No state can talk about any values when there is no purposeful education of specialists in cultural heritage in the country. This is especially true for those countries where cultural heritage dates back many centuries, e.g., many countries in Europe, Asia and America.

The novelty of this research lies in the fact that the author examines the scientific complex of cultural heritage through the prism of accumulated documentary experience and economic potential.

The study object is the world and national cultural heritage.

The study subject is a complex of sciences on cultural heritage.

The study aims to analyse the structure of cultural heritage sciences based on its relevance in creating an educational complex for future specialists in cultural heritage.



Based on the purpose of the study, the following tasks were developed:

- analyse the international documentation on cultural heritage aimed at its definition and use in practice;
- analyse the general economic preferences from using the potential of cultural heritage within the framework of UNESCO, ISO, and ICOMOS documentation;
- present an updated version of the complex of Klironomy, the sciences of cultural heritage. Logical, analytical, comparative and historical methods were used to achieve the purpose of the study and solve the developed tasks.

The study used UNESCO and ICOMOS documentation, as well as research materials from experts in cultural heritage and the leading author of the article.

#### Results

#### International Experience and Standards

Cultural heritage plays a key role in shaping national identity and strengthening social cohesion. It serves as a link between generations, transmitting values, traditions, and historical experience. Studind and preserving cultural heritage contribute to increasing the level of cultural self-awareness in society, which is particularly important in the context of globalisation and cultural homogenization. Recognising this field as a distinct scientific discipline will allow for a deeper understanding of the mechanisms through which cultural heritage influences social processes and will help develop effective strategies for its preservation.

The relevance of defining cultural heritage as a separate scientific discipline is determined by its significance for preserving and transmitting cultural values, as well as for forming national identity and the sustainable development of society. Cultural heritage includes both tangible and intangible assets created by previous generations that possess historical, artistic, scientific, or other cultural value. However, there is still no unified approach to defining and studying cultural heritage, which highlights the necessity of considering it as an independent field of scientific inquiry.

Defining cultural heritage as a distinct scientific discipline necessitates a robust framework of international standards. These standards, developed and adopted by intergovernmental organizations like UNESCO and ICOMOS, provide a common language and methodology for identifying, protecting, and managing cultural heritage globally. (*Charters and other doctrinal texts..., 2024*)

A cornerstone of these standards is the 1972 UNESCO Convention Concerning the Protection of the World Cultural and Natural Heritage (2022). This convention established the concept of OUV, a criterion used to determine if a cultural or natural site deserves inclusion on the World Heritage List. OUV signifies cultural and/or natural significance, which is so exceptional as to transcend national boundaries and to be of common importance for present and future generations of all humanity (2022). For instance, the Great Wall of China, recognised for its OUV as a testament to ancient architectural and military prowess, is inscribed on the World Heritage List. (*The Great Wall, 2024*)

Furthermore, the ICOMOS Charter for the Analysis, Conservation and Restoration of Architectural Heritage (1964, revised 1994) offers guidelines for the conservation and restoration of historic buildings and sites. It emphasises the importance of authenticity and



integrity, urging practitioners to respect the original fabric and historical context of heritage sites. An example of this is the conservation of the Venice Lagoon, where restoration efforts adhere to the principles of minimal intervention and respect for the existing materials and techniques (*Venice and its Lagoon, 2024*).

The UNESCO 2003 Convention for the Safeguarding of the Intangible Cultural Heritage broadened the definition of cultural heritage beyond tangible monuments to encompass intangible forms like oral traditions, performing arts, and traditional crafts (2003). This convention highlights the importance of community involvement in identifying and safeguarding intangible heritage, as seen in the recognition of Mediterranean diet as an intangible cultural heritage, emphasising the social practices and knowledge transmitted across generations (*Saulle La Torre, 2010*).

The UNESCO 2005 Convention on the Protection and Promotion of the Diversity of Cultural Expressions addresses the broader cultural landscape, including contemporary artistic expressions and cultural industries. It recognises the importance of cultural diversity as a source of creativity and innovation, and promotes policies that support the production and dissemination of diverse cultural goods and services (*Convention on the Protection..., 2005*).

Dated 1994, the Nara Document on Authenticity significantly influenced heritage conservation by challenging the Eurocentric notion of authenticity (*The Nara..., 2012*). It acknowledged that authenticity can be expressed in various ways, depending on the cultural context. This document allows for multiple interpretations of authenticity, recognising the dynamic nature of cultural heritage. For example, in the restoration of Japanese temples, the use of traditional materials and techniques, even if they involve periodic rebuilding, is considered authentic (*Coservation approach, 2005*).

The ICOMOS Principles for the Preservation of Historic Timber Structures provides specific guidance on the conservation of timber heritage, recognizing its unique characteristics and vulnerabilities. The conservation of the stave churches of Norway, which are predominantly built of wood, is guided by these principles (*Bertolin & Cavazzani, 2022*).

Finally, the UNESCO Recommendation on the Historic Urban Landscape of 2011 promotes an integrated approach to managing urban heritage, considering the interplay between built environment, natural environment, and social and cultural factors (UNESCO Recommendation..., 2012). This approach is evident in the urban planning of cities like Kyoto, where heritage preservation is integrated with contemporary development (Heritage Architecture, 2024).

These international standards provide a framework for a scientific approach to cultural heritage, emphasizing the importance of documentation, analysis, and ethical conservation practices.

#### The Economic Potential of Cultural Heritage

The economic potential of cultural heritage is intrinsically linked to its preservation and sustainable management, both of which are guided by a robust framework of international standards. These standards aim to balance the safeguarding of irreplaceable assets with their potential for economic development, primarily through tourism and related industries.



A cornerstone is the 1972 UNESCO World Heritage Convention, which establishes the concept of (OUV). This principle dictates that sites considered for World Heritage listing must possess cultural and/or natural significance that transcends national boundaries and be of common importance for present and future generations of all humanity. The OUV framework acts as a benchmark for assessing and managing cultural heritage, ensuring that economic activities do not compromise the integrity of these sites. For instance, the management plan for the Great Barrier Reef (a natural World Heritage site) incorporates stringent regulations to mitigate the impact of tourism and fishing, ensuring the long-term viability of its OUV.

ICOMOS plays a vital role in providing expert advice on cultural heritage conservation (*Introducing ICOMOS*). The ICOMOS Charter for the Interpretation and Presentation of Cultural Heritage Sites (2008) emphasizes the importance of authenticity and integrity in presenting heritage to the public. This standard directly impacts the economic potential of sites by guiding the development of visitor experiences that are both informative and respectful. For example, the restoration of historical buildings in Kyoto, Japan, adheres to ICOMOS guidelines, promoting authentic cultural tourism that generates substantial revenue while preserving the city's historical character.

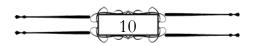
Furthermore, ISO standards, while not exclusively focused on cultural heritage, contribute to sustainable tourism practices. ISO 14001 "Environmental Management Systems" (2023) and ISO 26000 "Social Responsibility" (2021) are increasingly adopted by tourism operators at cultural heritage sites to minimize their environmental footprint and ensure ethical engagement with local communities. These standards are crucial for long-term economic benefits, as they foster responsible tourism that preserves the very assets that attract visitors.

The 2003 UNESCO Convention for the Safeguarding of the Intangible Cultural Heritage also plays a role. Intangible heritage, such as traditional crafts, music, and dance, can be a powerful economic driver when sustainably integrated into tourism offerings. Recognising and protecting these practices ensures that they remain viable for future generations, contributing to both cultural preservation and economic diversification. For example, the recognition of traditional Korean mask dance, Talchum, as intangible cultural heritage has increased tourism and related economic activity.

*In conclusion*, international standards provide a crucial framework for harnessing the economic potential of cultural heritage while ensuring its sustainable preservation. They promote responsible tourism, authentic visitor experiences, and ethical engagement with local communities, ultimately contributing to long-term economic benefits.

#### The Need to Systematise Knowledge about Cultural Heritage

Cultural heritage is a complex and multifaceted phenomenon that encompasses various aspects of human activity. Its study requires an interdisciplinary approach combining history, art history, archaeology, anthropology, sociology and other sciences. However, the lack of a unified scientific discipline specifically devoted to cultural heritage leads to fragmentation of knowledge and methodological approaches. The creation of a separate science will make it possible to systematise research, develop generally accepted terms and methods, which will increase the effectiveness of preserving and using cultural heritage.



To systematise knowledge about cultural heritage highlights the imperative of organising and structuring information concerning cultural assets to ensure their preservation, accessibility, and sustainable management. This endeavor is intrinsically linked to the adoption and implementation of international standards that provide frameworks for identifying, documenting, and protecting cultural heritage.

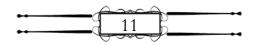
International standards in cultural heritage are crucial for fostering global cooperation and consistency. These standards encompass a broad spectrum, from defining what constitutes cultural heritage to establishing protocols for its safeguarding. One prominent example is the UNESCO 1972 Convention Concerning the Protection of the World Cultural and Natural Heritage. This convention establishes the concept of OUV and provides criteria for inscribing cultural and natural sites on the World Heritage List. It emphasises the significance of states parties identifying, protecting, conserving, and presenting their cultural and natural heritage. For example, the inscription of the Great Wall of China or the Taj Mahal on this list signifies their global significance and necessitates adherence to the convention's guidelines (*Convention Concerning..., 2022*).

Another significant standard is the ICOMOS charters and doctrines. These documents provide detailed guidance on the conservation and restoration of historic buildings and sites (*Principles for the Analysis..., 2003*). The Venice Charter of 1964 is a foundational document that outlines principles for the conservation and restoration of monuments and sites. It stresses the importance of respecting the original fabric and avoiding conjectural restorations. Later doctrines, like the Nara Document on Authenticity, broadened the understanding of authenticity to encompass cultural contexts and values beyond material form. The Nara document arose from a realization that western-centric views of authenticity were insufficient for the world's diverse cultures. This document shifted to a more inclusive perspective, acknowledging that authenticity judgments can vary significantly across cultures and time periods (*The Nara Document..., 2012*).

The ISO standards also play a role in cultural heritage management. For instance, ISO 21118:2020 (2020) provides guidelines for the long-term preservation of digital cultural heritage. With the increasing digitisation of cultural resources, this standard is vital for ensuring that digital archives remain accessible and usable for future generations. It provides a framework for managing metadata, ensuring file format sustainability, and implementing long-term storage solutions.

Furthermore, the Council of Europe's Faro Convention (2005) emphasises the value of cultural heritage as it relates to human rights and democracy. It promotes a broader understanding of cultural heritage that includes intangible elements and the active participation of communities in heritage management. This convention recognises that cultural heritage is not just about objects and sites but also about the values, practices, and knowledge that communities associate with them.

The implementation of these standards necessitates the development of robust documentation systems. The CIDOC CRM, an ISO 21127 (2023), provides a formal ontology for cultural heritage information. It enables the integration and exchange of data across different institutions and disciplines. This is crucial for creating comprehensive and interoperable databases of cultural heritage. For example, the CRM allows for the linking of archaeological



finds, historical documents, and museum objects, providing a more holistic understanding of cultural heritage.

The challenges in systematising knowledge about cultural heritage include the diverse nature of heritage, the varying levels of resources and expertise across countries, and the need to balance preservation with access and sustainable use. However, by adhering to international standards and fostering collaboration, we can ensure that cultural heritage is effectively managed and transmitted to future generations. The ongoing development of digital tools and platforms also presents opportunities for improving the accessibility and management of cultural heritage information (*Siliutina et al., 2024*).

*Thus*, the systematisation of knowledge about cultural heritage is crucial for its preservation and accessibility. International standards provide the necessary frameworks for achieving this goal, ensuring that cultural heritage is recognized, protected, and enjoyed by all.

#### Klironomy As the Science of Preserving Cultural Heritage

In the context of distinguishing cultural heritage into a separate scientific discipline, the concept of klironomy deserves special attention. Klironomy is considered as the science of preserving historical and cultural heritage, combining various areas related to the study, conservation, restoration and popularisation of cultural values. The author notes that Klironomy is designed to integrate the achievements of social sciences and humanities to develop a systematic approach to the preservation of cultural heritage (*Buychik, 2018a*).

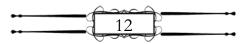
In the realm of cultural heritage preservation, a nascent science, Klironomy, emerges as a vital tool for understanding and safeguarding the dynamic evolution of cultural landscapes. Moving beyond the static documentation of artifacts, Klironomy aims to map the temporal tapestry of cultural heritage, revealing the intricate web of interactions, transformations, and layers that define a site's significance. It emphasises the diachronic dimension, treating cultural heritage not as a fixed entity, but as a living, evolving process (*Bnychik, 2019c*).

Klironomy draws upon a multidisciplinary approach, integrating archaeological excavation, historical research, environmental analysis, and digital modelling to reconstruct the chronological sequence of events that shaped a cultural site. It seeks to understand how human activity, natural processes, and societal shifts have interacted over time to create the heritage we see today.

Klironomical thinking is formed solely within the framework of studying the features of the formation and preservation of objects, objects and elements of cultural heritage (*Buychik*, 2019a). To educate specialists in cultural heritage, specialised education is needed in which students and future scientists will study not only the archaeological features of heritage formation, but also all the basic methods of preserving culture and art – restoration, conservation, revitalisation and reconstruction (*Buychik*, 2020).

Therefore, it is necessary to create a clear system of cultural heritage sciences, a hierarchy of sciences and a methodological basis. The basic system of cultural heritage sciences developed over the past 10 years is presented below.

Definition. Klironomy is the science of preserving cultural heritage.



*Place in the system of sciences.* Klironomy is a new cross-border scientific field at the intersection of natural, humanitarian, social, and economic sciences. Therefore, the definition of "Klironomy Science" is nearer to the Social Sciences and Humanities.

*Relevance.* Cultural heritage preservation is a priority in the evolution of society because it carries a social genome that forms the image of new social generations. Cultural heritage preservation dates back to ancient civilisations in its primary sense. Some scientific research in this field was already registered in the 18<sup>th</sup> century, and comprehensive studies have been conducted over the past 100 years.

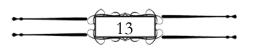
The science subject is the process of preserving cultural heritage objects and elements.

The object of the science is tangible and intangible cultural heritage.

The science aims to preserve cultural heritage objects and elements.

The tasks of the science:

- describe the state of the objects and elements of cultural heritage for the relevance and scope of restoration work;
- analyse the state of the objects and elements of culture and art to include them in the cultural heritage list and categorise them;
- develop methods of preservation, restoration, renovation, revitalisation and reconstruction of the cultural heritage objects and elements;
- form a scientific base;
- conduct scientific and educational activities;
- prevent cultural heritage preservation. *Functions of the science:*
- preserving all kinds of cultural heritage;
- recovering damaged or partially lost parts of the cultural heritage objects or elements;
- reconstructing the lost cultural heritage objects or elements. *Principles of the science:*
- Not harm, but restore if did harm.
- Assume based on available knowledge.
- Reconstructing proof in search of counterpart. *Basic theoretical methods of the science:*
- The axiological method allows one to determine the value of cultural objects or elements and classify them as part of the cultural heritage.
- The analytical method makes it possible to analyse the main stages of the creation and existence of cultural heritage objects or elements for the purpose of realising a competent approach to its preservation or restoration.
- Synthesis allows connecting the achievements of human thought isolated from various sciences in a single whole to preserve cultural heritage objects and elements.
- Comparative analysis serves as a basis for determining the main directions for preserving cultural heritage restoration, conservation, renovation, and revitalisation and separating them in the process of choosing one direction.



• System analysis allows differentiation of the separate sciences within the framework of this scientific direction and identification of the path of sequence and interaction of Klironomical Sciences.

*Classification of the science.* Klironomy is the science of cultural heritage preservation in the complex, considering two basic directions for forming this heritage type – tangible and intangible. The theoretical basis is the crown of the Science. Consequently, Klironomy includes three scientific klironomical directions of its development:

- (1) Tactile Klironomy is the direction of the Klironomy of tangible cultural heritage: architecture, sculpture, paintings, decorative arts;
- (2) Facile Klironomy is the direction of the Klironomy of intangible cultural heritage: mythology, folklore, religion, music;
- (3) Theoretical Klironomy is the direction of the Klironomy combining fundamental, applied and historical research in cultural heritage preservation.

*Thus*, Klironomical Sciences can be presented as a complex of the preservation sciences, which are included in three main directions presented in the appendix (*Figure 1*).

Now, it is necessary to start with Tactile Klironomy as a scientific direction of Klironomy. *Definition.* Tactile Klironomy is a scientific direction of Klironomy of tangible cultural heritage. We can observe tangible cultural heritage, but we can also touch it through tactile perception. Visual and tactile sensations are the main ones for a person, and they retain information best of all. Restoring cultural heritage objects is visual and tactile, like working with any material object. Hence, Tactile Klironomy is logical and natural in defining tangible cultural heritage preservation: conservation, restoration, renovation, and revitalisation.

*Place in the Klironomical Sciences system.* Tactile Klironomy, or klironomy of tangible cultural heritage, is one of three areas of cultural heritage preservation science.

*Relevance.* Preserving tangible cultural heritage is highly significant. It is based on the fundamental development goals of any society. Society cannot develop from nothing. It forms new cultural values in isolation from the past. Materialised into objects, the past can preserve valuable information necessary for forming the correct worldview of the individual.

The scientific direction's subject is preserving objects recognised by the cultural heritage.

The scientific direction's object is tangible cultural heritage.

The scientific direction aims to preserve cultural heritage objects.

The tasks of the scientific direction:

- describe the condition of the objects of tangible cultural heritage and determine the scope of recovery work;
- analyse the state of objects of culture and art to include them in the list of tangible cultural heritage and to categorise them;
- develop methods of preservation, recovery, and reconstruction of tangible cultural heritage objects;
- form a scientific base;
- conduct scientific and educational activities;
- prevent tangible cultural heritage preservation. *Functions of the scientific direction:*



- preserving all types of tangible cultural heritage;
- recovering damaged or partially lost parts of tangible cultural heritage objects;
- reconstructing lost objects of cultural heritage. *The main theoretical methods of research remain basic for the scientific direction:*
- The axiological method allows one to determine the value of tangible cultural objects and classify them as part of the cultural heritage.
- The analytical method allows one to analyse the main stages of creation and existence of tangible cultural heritage objects to purposely take a competent approach to their preservation or recovery.
- Synthesis allows us to connect the achievements of human thought isolated from various sciences and use them to preserve tangible cultural heritage objects in a single whole.
- Comparative analysis serves as a basis to determine the main directions of cultural heritage preservation restoration, conservation, renovation, and revitalisation and to separate them in choosing one of the directions.
- System analysis allows us to differentiate separate sciences within the scientific direction of the Tactile Klironomy and identify the path of sequence and interaction of the Tactile Klironomical Sciences.

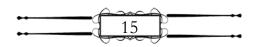
The system of the Tactile Klironomy is present in the appendix (Figure 2).

Next, it is offered to meet the characteristics of the second direction of Klironomy – Facile Klironomy.

*Definition.* Facile Klironomy is the scientific direction of the klironomy of the intangible cultural heritage of society. The "intangible cultural heritage" means the practices, representations, expressions, knowledge, and skills – like the instruments, objects, artefacts and cultural spaces associated in addition to that – that communities, groups and, in some cases, individuals recognise as part of their cultural heritage. This intangible cultural heritage, transmitted from generation to generation, is constantly recreated by communities and groups in response to their environment, interaction with nature, and history. It gives them a sense of identity and continuity, thus promoting respect for cultural diversity and human creativity. For this Convention, consideration will be given solely to such intangible cultural heritage compatible with existing international human rights instruments, like the requirements of mutual respect among communities, groups and individuals, and sustainable development. The UNESCO Convention lists specific manifestations of intangible cultural heritage in several areas:

- oral traditions and expressions, including language as a vehicle of intangible cultural heritage;
- performing arts;
- social practices, rituals and festive events;
- knowledge and practices concerning nature and the universe;
- traditional craftsmanship.

The term "facil klironomy" comes from the Latin word "facile", translated as "easy" in English. This variant is chosen to ratio spiritual, intangible cultural heritage to tangible. Therefore, Facile Klironomy is the klironomical direction of intangible (spiritual) cultural



heritage: mythology, folklore, religion, music, i.e., oral traditions, performing arts, knowledge, abilities, skills and customs of different peoples and social groups.

Thus, the term "facile klironomy" is logical and natural for the definition of "intangible cultural heritage preservation: conservation, restoration, renovation and revitalisation".

*Place in the Klironomical Sciences system.* The Facile Klironomy, or the klironomy of intangible cultural heritage, is one of three areas of the science of cultural heritage preservation.

*Relevance.* The preservation of intangible cultural heritage is essential for the fundamental development of any society. Society cannot develop from anything and form new spiritual and cultural values in isolation from the past. The past, enclosed in the elements of oral creativity, knowledge and traditions, can preserve valuable information necessary to form the correct worldview of the individual.

*The scientific direction's subject* is preserving intangible heritage elements recognised by society's cultural heritage.

The scientific direction's object is intangible cultural heritage.

The scientific direction aims to preserve intangible cultural heritage elements.

Tasks of the scientific direction:

- hold a description of the status of intangible cultural heritage elements and a definition of the restoration work scope;
- analyse the state of intangible cultural elements to include them in the list of cultural heritage and categorise them;
- develop methods of preservation, recovery and reconstruction of intangible cultural heritage elements;
- form a scientific base;
- conduct scientific and educational activities;
- prevent intangible cultural heritage preservation. *Functions of the scientific direction:*
- preserving all types of intangible cultural heritage;
- recovering damaged or partially lost elements of intangible cultural heritage;
- reconstructing lost elements of intangible cultural heritage.
  - The main theoretical methods of research remain basic for the scientific direction:
- The axiological method allows for determining the value of an element of culture and classifying it as part of intangible cultural heritage.
- The analytical method allows for analysing the main stages of creation and existence of an intangible cultural heritage element to aim at a competent approach to its preservation or recovery.
- The synthesis allows us to connect the achievements of human thought, isolated from various sciences, in a single whole to the purpose of their use in preserving intangible cultural heritage elements.
- Comparative analysis serves as a basis for determining the main directions for preserving intangible cultural heritage restoration, conservation, renovation, and revitalisation and their separation in choosing one of the directions.



• System analysis allows differentiation of a separate science within the scientific direction of "Facile Klironomy" and identification of the path of sequence and interaction of the Facile Klironomical Sciences.

The system of the Facil Klironomy is present in the appendix (*Figure 3*).

Finally, it is necessary to characterise the third direction of Klironomy – Theoretical Klironomy.

*Definition.* Theoretical Klironomy is a special scientific direction of the klironomy of cultural heritage. In contrast to Tactile and Facile Klironomy, which combine the applied sciences of Klironomy, i.e., the body of knowledge in which research and discovery have immediate, direct orientation to the practice and support the development of new technologies – the algorithms of steps to obtain the desired product, the Theoretical Klironomy analyses questions of the basis of all science – history, methodology, systematics and statistics in preservation of the objects, items and elements of cultural heritage – tangible and intangible.

Thus, "Theoretical Klironomy" is logical and natural in defining "the theoretical foundations of the preservation of tangible and intangible cultural heritage: conservation, restoration, renovation and revitalisation."

*Place in the system of the klironomical sciences.* Theoretical Klironomy is one of three fields of the science of preserving cultural heritage.

Relevance. The development of a theoretical basis for preserving cultural heritage includes a large set of foundations that should be widely used in the applied fields of the science directions - Tactile and Facile Klironomy. The analysis of the history of actions for the preservation of the social life heritage is one of the most significant fields of Theoretical Klironomy because it allows the creation of a clear and verified chronology of the human mind evolution in the area of the significance and grandeur of cultural heritage. Taxonomy of the sciences and scientific directions of Klironomy allows the structure of the professional activities of specialists in cultural heritage preservation, like separate profiles of specialisation. It substantiates the pedagogical basis for preparing these specialists. The methodology of theoretical and practical studies sums up the basis of the philosophical criteria to select each klironomical science and the base to create academic disciplines from the point of pedagogical view. The statistics should become the basis for the analytical activities in cultural heritage preservation in all research directions and separate klironomical sciences. The collection of artefacts, the geography of the location and findings, the different levels of their condition, belonging to certain ethnic and social groups, methods, and techniques of conservation, restoration, renovation and revitalisation are subjects to statistics on the basis of which further systematics of various types does. Therefore, the Theoretical Klironomy is a separate and significant direction of Klironomy as the science of preserving cultural heritage.

The scientific direction research's objects are tangible cultural heritage objects and intangible cultural heritage elements.

The scientific direction research's subjects are history, methodology, statistics, and the systematics of preserving tangible and intangible cultural heritage.

The scientific direction aims to develop the theoretical bases of klironomy as a science of preserving tangible and intangible cultural heritage.

Tasks of the scientific direction:



- perform historical analysis of human and society's activity in the field of cultural heritage preservation;
- develop a methodology for the formation of the scientific directions of Tactile and Facile Klironomy;
- perform statistical research in Tactile and Facile Klironomical directions, i.e., objects, items and elements of cultural heritage, like methods and techniques of their conservation, restoration, renovation and revitalisation;
- systematise the received statistical data in preserving cultural heritage. *Functions of the science:*
- preserving all types of cultural heritage;
- systematising archaeological artefacts of cultural heritage, methods, and techniques of their conservation, restoration, renovation and revitalisation;
- historiography of research in preserving cultural heritage. The main theoretical methods of research remain basic for the scientific direction:
- 1. Historical methods are a method of sociological research, including techniques and tools used to study and interpret the texts of primary sources and search for other evidence, including archaeological evidence. Historical methods are also used for presenting historical events and as theory knowledge methods.
- 2. The analytical method allows us to analyse the main stages of human thought regarding the evaluation of cultural heritage, aiming for a competent approach to its preservation or recovery.
- 3. Synthesis allows us to connect in a single whole the achievements of human thought isolated from various sciences, aiming to use them in preserving cultural heritage elements.
- 4. Comparative analysis is the basis for determining the main directions of preserving cultural heritage restoration, conservation, renovation, and revitalisation and separating them to choose one of the directions.
- System analysis allows for differentiation of the research of directions and their particular sciences, identifying the path of klironomical sciences' sequence and interaction. The system of the Theoretical Klironomy is present in the appendix (*Figure 4*).

#### Discussion

This study has been performed for more than 10 years after actualising the separation of restoration into a separate science, since in a number of leading countries of the world restoration work has received a great methodological basis that has allowed the opening of professional courses for bachelor's degrees in restoration and then for the training of scientists in restoration. There are several problematic factors that affect the theoretical part of the study. One of the main factors can be considered the extreme passivity of the scientific world to changes after a period of rapid discoveries and innovations. In fact, we have to admit that most leaders in science and management of art and culture do not see obvious trends towards defining special attention to cultural heritage not only as a science about the past, but also as a science about the future existence of those cultural objects, items and elements that is worth predetermining as a future cultural heritage. To form such a vision or professional worldview,



it is necessary to train professional specialists in cultural heritage, which is fundamentally different from the training, e.g., of specialists in museology. Another important factor that hinders the development of this research is the low sensitivity of the scientific community of social sciences to innovation. On the one hand, stylistic innovations and transformations periodically occur in art. On the other hand, these changes require special efforts from theorists in understanding the processes of transformation. In culture, scientific thought, more often than not, also follows trends but does not shape them.

The example of the actualisation to allocate and form a complex of sciences about cultural heritage clearly shows the inhibition of scientific thought and activity in culture and the arts. As a result, it is quite difficult to find associates in developing this scientific thought, especially among the leading scientists and managers from science.

By 2025, the primary methodological framework has been developed in all three areas of the complex of sciences on cultural heritage, as well as in 19 separate sciences of Klironomy. Now it is necessary to develop two directions:

- The first direction is related to the description of klironomical blocks tactile, facil and theoretical klironomy. They are basic to the individual sciences of Klironomy.
- (2) The second area of research is related to the creation of basic textbooks or scientific papers on each of the klironomical sciences. This requires either the complex work of a separate specialised department or a small community of specialists and researchers in culture, art and cultural heritage.

#### Conclusion

*Thus*, the fact of forming documentation on cultural heritage in the basic international organizations – UNESCO, ISO and ICOMOS – and the economic efficiency of cultural heritage, enshrined in the ISO standards, make it possible to move on to forming a complex of sciences that will aim to produce specialists engaged in various fields of conserving existing objects, itemss and elements of cultural heritage and the formation of a basis for preserving existing and currently created objects, items and elements that meet the requirements of preservation for future generations.

The complex of Klironomy, or the sciences of cultural heritage, will provide a unique scientific look at the principles and traditions of preserving what will be of fundamental importance for future generations.

#### **Conflict of interests**

The authors declare no conflict of interest.

#### **References:**

1972 UNESCO Convention Concerning the Protection of the World Cultural and Natural Heritage. (2022). *The Blue Shield*. https://theblueshield.org/resources/law-library/treaty-law-and-the-1954-hague-convention/the-1972-convention-concerning-the-protection-of-the-world-cultural-and-natural-heritage-the-world-heritage-convention/

2003 Convention Safeguarding Cultural Heritage. (2024). The Blue Shield. https://theblueshield.org/2003-convention-safeguarding-cultural-heritage/



Bertolin, C., & Cavazzani, S. (2022). Potential of frost damage of off-ground foundation stones in Norwegian Stave Churches since 1950 using land surface temperature. *Heliyon*, 8(11), e11591. https://doi.org/10.1016/j.heliyon.2022.e11591

Buychik, A. (2018a). Achievements in the field of social sciences and Humanities in restoration and conservation. *Online Electronic Scientific Journal "Vestnik GSU"*, 4. (In Russ.). http://vestnik-ggu.ru/doc/4\_2018/bujchik.pdf

Buychik, A. (2018b). Categories and types of objects of historical and cultural heritage on the territory of the Russian Federation. *Online Electronic Scientific Journal "Vestnik GSU"*, 5. (In Russ.). http://vestnik-ggu.ru/doc/5\_2018/bujchik.pdf

Buychik, A. (2019a). Klironomy – the science of preserving historical and cultural heritage. *Series:* Cognition. Modern Science: Actual Problems of Theory and Practice, 3, 90-93. (In Russ.). http://www.nauteh-journal.ru/files/a3f576d7-3138-4d6c-8c4c-a68c6395ea4c

Buychik, A. (2019b). *Klironomy as a science of preservation of cultural heritage*. Mauritius, France, Germany: LAP Lambert Academic Publishing.

Buychik, A. (2019c). Philosophical understanding of the value of historical and cultural heritage. Series of Cognition. Modern Science: Actual Problems of Theory and Practice, 6, 103-106. (In Russ.). http://www.nauteh-journal.ru/files/9b3b085c-48ff-495d-a022-72451d6c4c06

Buychik, A. (2019d). The problem of formation of klironomy as a science of the preservation of cultural heritage. *Science in the Modern World. Collection of Publications of the Multidisciplinary Scientific Journal* "Archivarius" in Kiev: Collection of Articles, 12(45), 28-31. Kiev. https://doi.org/10.31618/2524-0935-2019-45-12-2

Buychik, A. (2020). Klironomy as a systematic scientific approach to the preservation of cultural heritage: its place in the educational system. *Scientific Trends: Philology, Cultural Studies, Art History. Collection of Scientific Papers. Proceedings of the 19th International Scientific and Practical Conference*, 29-34. (In Russ.). https://doi.org/10.18411/spc-26-02-2020-07

Buychik, A. (2021a). The formation of klironomical thinking in the system of the social outlook. *Eastern European Humanitarian Collection of Mini Monographs. European Scientific e-Journal*, 1(7), 108-154. https://doi.org/10.47451/phi2020-12-001

Buychik, A. (2021b). The relevance of the formation of the science of the cultural heritage preservation as the evolution of social and scientific thought. *Scientific View on the Modern Problems of Cultural Heritage and Arts in the Context of Social Development. Klironomy*, 1, 7-21. https://doi.org/10.47451/her2021-06-001

Buychik, A. (2023). The relevance of creating a scientific and educational complex for training specialists in revitalization. *Culture and Arts in the Context of World Cultural Heritage. Klironomy*, 7, 71-81. https://doi.org/10.47451/her2023-03-01

Charters and other doctrinal texts. (2024). ICOMOS. https://www.icomos.org/en/what-we-do/involvement-in-international-conventions/standards

Conservation approach. (2005). The Japanese Association of Conservation of Architectural Monuments. https://www.bunkenkyo.or.jp/en/

Convention Concerning the Protection of the World Cultural and Natural Heritage. (2022). UNESCO. https://whc.unesco.org/en/conventiontext/

Convention on the Protection and Promotion of the Diversity of Cultural Expressions. (2005). UNESCO. https://www.unesco.org/en/legal-affairs/convention-protection-and-promotion-diversity-cultural-expressions

Convention on the Value of Cultural Heritage for Society. (2005). *Culture and Cultural Heritage*. https://www.coe.int/en/web/culture-and-heritage/faro-convention

Falser, M. (2015). *Cultural heritage as civilizing mission*. From decay to recovery. Heidelberg, New York: Springer.

Gorelova, Y. R. (2016). Actualisation of cultural heritage as a significant task of cultural policy. *Journal of the Heritage Institute*, 4(7). (In Russ.)



Heritage architecture in urban planning: Integrating old and new in city development. (2024). *Kaarwan.* https://www.kaarwan.com/blog/architecture/heritage-architecture-urban-planning-old-and-new-city-development?id=1125

Hudson-Ward, A., Widholm, J. R., & Scott, W. (Eds.). (2023). Cultural heritage and the campus community: Academic libraries and museums in collaboration. ACRL.

Introducing ICOMOS. (2020). ICOMOS. https://www.icomos.org/en/about-icomos/missionand-vision/mission-and-vision

ISO 14002-2:2023. (2023). Environmental management systems – Guidelines for using ISO 14001 to address environmental aspects and conditions within an environmental topic area. https://www.iso.org/standard/79165.html

ISO 21118:2020. (2020). Information technology – Office equipment – Information to be included in specification sheets for data projectors. https://www.iso.org/standard/74674.html

ISO 21127:2023. (2023). Information and documentation – A reference ontology for the interchange of cultural heritage information. https://www.iso.org/standard/85100.html

ISO 21902:2021. (2021). Tourism and related services – Accessible tourism for all – Requirements and recommendations. https://www.iso.org/standard/72126.html

ISO 26000:2021. (2021). Guidance on social responsibility. https://www.en-standard.eu/une-eniso-26000-2021-guidance-on-social-responsibility-iso-26000-2010/

Lebedev, S. V. (2013). *Philosophy and traditional applied art of Russia*. St. Petersburg: Higher School of Folk Arts. (In Russ.)

Loginova, M. V. (2021). Actualization of cultural heritage in the context of the tasks of modern cultural policy. *Sphere of Culture*, 4(6), 73-79.

Outstanding Universal Value. (2022). UNESCO. https://whc.unesco.org/en/glossary/327

Principles for the Analysis, Conservation and Structural Restoration of Architectural Heritage. (2003). *ICOMOS*. https://www.icomos.org/images/DOCUMENTS/Charters/structures\_e.pdf

Principles for the Preservation of Historic Timber Structures. (1999). ICOMOS. https://www.icomos.org/images/DOCUMENTS/Charters/wood\_e.pdf

Sandis, C. (Ed.). (2014). Cultural heritage ethics: Between theory and practice. Open Book Publishers.

Saulle, R., & La Torre, G. (2010). The Mediterranean Diet, recognized by UNESCO as a cultural heritage of humanity. *Italian Journal of Public Health*, 7(4). https://doi.org/10.2427/5700

Siliutina, I., Tytar, O., Barbash, M., Petrenko, N., & Yepyk, L. (2024). Cultural preservation and digital heritage: challenges and opportunities. *Revista Amazonia Investiga*, 14, 262-273. https://doi.org/10.34069/AI/2024.75.03.22

Sokolova, A. S. (2013). Methodological problems of cultural heritage research. Bulletin of the Adygea State University. Series 1: Regional Studies: Philosophy, History, Sociology, Jurisprudence, Political Science, Cultural Studies, 4(130), 218-223. (In Russ.)

Text of the Convention for the Safeguarding of the Intangible Cultural Heritage. (2003). UNESCO. https://ich.unesco.org/en/convention

The Great Wall. (2024). UNESCO. https://whc.unesco.org/en/list/438/

The ICOMOS Charter for the Interpretation and Presentation of Cultural Heritage Sites. (2008). ICOMOS. https://www.icomos.org/images/DOCUMENTS/Charters/interpretation\_e.pdf

The Nara Document on Authenticity. (2012). *ICOMOS*. https://www.icomos.org/en/179-articlesen-francais/ressources/charters-and-standards/386-the-nara-document-on-authenticity-1994

Timothy, D. J., & Nyaupane, G. P. (2009). *Cultural heritage and tourism in the developing world: A regional perspective*. Taylor & Francis.

UNESCO Recommendation on the Historic Urban Landscape. (2012). UNESCO. https://whc.unesco.org/en/hul/

Venice and its Lagoon. (2024). UNESCO. https://whc.unesco.org/en/list/394/



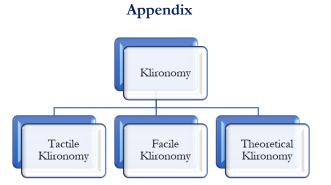


Figure 1. The first level structure of the Science of Klironomy



Figure 2. The Tactile Klironomy sciences: the second level structure of the Science of Klironomy



Figure 3. The Facile Klironomy sciences: the second level structure of the Science of Klironomy



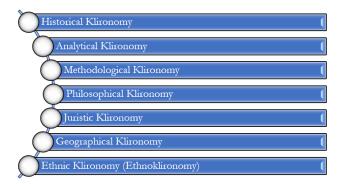


Figure 4. The Theoretical Klironomy sciences: the second level structure of the Science of Klironomy



#### Metaphysical principles of causality and normativity in historical knowledge [2]

*Abstract:* The article is dedicated to the metaphysical basis of the freedom of will. Metaphysical principles of causality are considered as sources of accomplishment of different deeds. The evolution of the given principles in developing human civilization is examined. A principle of causality, which is regarded as a fundamental ontological characteristic of existence, suggests that man can fulfill his aspiration for freedom only when he subjugates his life to the objective Universal Law. From a causal perspective, any phenomenon is considered a consequence of some reason and simultaneously a cause of some different consequence. The author concludes that the realization of the complexity and diversity of the world and, consequently, the impossibility of finding any unrealistic "master key" method that works equally effectively in both the natural and socio-humanitarian spheres. Most likely, it is worth recognizing that two fundamental metaphysical principles interpret the nature of human actions in different ways. The metaphysics of causality considers them consecutive links of a specific universal series. Freedom is understood here as strictly following this series, any deviation from which is interpreted as an absolute evil. The metaphysics of normativity prefers to consider human actions as independent acts of realization of freedom, for each of which a person bears full responsibility.

Keywords: causality, normativity, freedom of will, necessity, objective universal law.

#### Introduction

One of the urgent problems of any transitional society is the theoretical understanding of the freedom of human will and its metaphysical foundations. In this regard, the metaphysical principles of causality and normativity act as the fundamental foundations of the organization of our ideas about the world and its cognition.

Since the middle of the 20<sup>th</sup> century, as the historical and socio-cultural conditionality of the rationalistic ideals of classical philosophy has been revealed, the initial intuition of a certain universal, unified and unique rationality has been losing its former clarity and becoming vaguer and indefinite. In any case, it becomes evident that rationality can be theoretical knowledge and practical human behavior, not mediated by any theory.

#### Results

The rationality of actions presupposes, at least, their motivation. Motivation, in turn, is determined, on the one hand, by the reality, the objective circumstances in which a person finds himself, and on the other hand, by his determination, understanding, and comprehension of these circumstances. Depending on the intended meaning, a person's behavior in the same circumstances can be very different – up to the diametrically opposite. The past determines the reality, all circumstances are conditioned by events that have already taken place and led in their entirety to the present state. The task is not directly present. Instead, it is an urge, an aspiration to realize a specific imperative offered to a person or assumed by him as an ideal or norm. Thus, the present in which a person finds himself is a gap between the given (the past) and the given (the projection of the future). In this gap, a person's real life is realized, constantly connecting the thread of his being with his thoughts and actions.



Determination, as well as reality, is something out of place concerning a person; therefore, the pursuit of it can be considered a constantly renewed attempt to go beyond the boundaries of reality, as a desire for transcendence. One of the forms of realization of this aspiration is science as a way of transcending a given by formulating the laws of nature and methodological principles of thinking. However, science is not the only form of realization of such an aspiration. Prigozhin, e.g., writes that "Europeans live at the intersection of at least two different value systems: on the one hand, scientific rationality, and on the other, the rationality of collective behavior." (*Prigozhin, 1989*) However, rationality, whatever it may be, is always based on a conscious belief or an instinctive belief in the existence of a particular stable order in the world. The very existence of such a belief (or faith) is the most profound basis for the assertion of ontological definitions of being, and the actual content of these definitions largely depends on the content of the fundamental beliefs or beliefs of a particular historical epoch. How and from what do such beliefs arise, how do they affect the content of our ontological representations, how do they change, and what happens as a result of such changes?

In primitive thinking, there might not have been anything at all and, most likely, there really was nothing similar to modern scientific ideas about nature as an ordered sequence of phenomena interconnected by causal (causal) relationships. However, this hardly means that primitive thinking does not have the concept of an orderly world. Instead, we can speak not about the absence, but about the different nature of this order. What appears to modern scientific consciousness as a nature outside of and even opposed to man was, for ancient man, a direct continuation of his life world, instead rigidly bound by a system of moral or legal norms. The social order that regulates human behavior extends to the whole world, the understanding of which is based not on causal (cause – effect), but on normative (guilt – retribution) relations.

Ethnographic research shows that the idea that a person is responsible for everything that happens in the world belongs to the most ancient stereotypes of thinking. Many ethnographers point out that primitive man interpreted natural phenomena not as spontaneous events indifferent to his fate, but in strict accordance with the principle of retribution, considering favorable events as a reward and unfavorable ones as punishment. The dualism of nature as a causal order and society as a normative order was utterly alien to the primitive consciousness, just as it is alien (albeit with the opposite sign) to the scientific consciousness of modern man.

Potentially, the worldview based on normative relations differs significantly from the causal one, although the mythoreligious consciousness may be utterly insensitive to this difference for a long time. After all, for him, the connection of natural phenomena, just like the connection of social phenomena, is the result of a divine institution. The laws of nature, just like social laws, are nothing more than an expression of the creator's will – norms prescribing specific rules of behavior to natural objects, the violation of which entails inevitable punishment (*Rozhansky, 1989*). Notably, the cause and the fault were designated in Ancient Greece by the same word – atria. Apparently, the idea of the law of cause-and-effect relations arises as a result of a rethinking of the concept of the law-norm linking guilt and retribution. The transition from the normative to the causal order consists in a person's realization that the relations between things, unlike the relations between people, are independent of neither human nor superhuman will, or, what is the same thing, are not determined by norms. However, this transition was neither simple nor instantaneous.



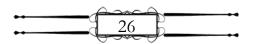
The history of forming a conviction in the existence of an entirely impersonal natural order, a sentence that forms the ontological core of classical rationality, stretches from the first natural philosophers of Ancient Greece right up to the meta-scientific research of Galileo, Descartes and Newton. In Plato's philosophy, the idea of the Cosmos emerges as a hierarchically organized system in which the ideal world is separated from the objective world and opposed to it. This higher world of pure entities is interpreted as an eternal and unchangeable prototype (perfect plan), according to which the order of things and phenomena that make up a person's immediate environment arises and exists. The order of the objective world is revealed to us as a reflection of the order that exists in the ideal world, but the reflection is crude, inaccurate, approximate. Actual being is not given to us in our direct experience. Therefore, comprehending universal laws and the true meaning of existence is achievable only through pure contemplation. Empirical knowledge does not deserve to be called knowledge and is designated by the unique term "opinion." Genuine knowledge results from intellectual contemplation, revealing the preset order and meaning of the world, which means man's true purpose.

Nevertheless, ancient philosophy has no complete separation of causality from normativity. Many ancient authors continue to interpret the law of nature precisely as an established order. The concept of cause is practically indistinguishable from the concept of fate: "Everything happens according to the dictates of fate, as Chrysippus, Posidonius, Zeno, and Boethius say <...> Fate is a continuous [chain] of causes of existence or reason, according to which it is controlled the universe." (Diogenes Laertius (*Losev, 1979, VII, p. 149*)) Even by the 17<sup>th</sup> century. This separation cannot yet be considered a fait accompli. Thus, in his "Discourse on Method" Descartes writes about the laws "established by God in nature," and in a letter to Mersenne asserts that "God established these laws... just as a sovereign sets the laws in his kingdom." (*Kline, 1984*) Newton takes a decisive step towards completely separating the causal order from the normative one when he gives a law of nature a universal character.

Affirming the unity of celestial and terrestrial mechanics laws, Newton proceeds from the firm conviction that there is a single and unique world order encompassing all phenomena of both the supralunar and sublunar worlds. The ancient concept of the Cosmos as a hierarchically ordered system is being replaced by the idea of the Universe, fundamental to Modern science, the order and laws of which equally relate to the movement of celestial bodies and the movement of terrestrial objects described by the same mathematical formulas. And although Newton's own fundamental beliefs still contain reminiscences of the ancient normative order, his theism is already "just around the corner" not only to Leibnizian deism, but also to Laplace's radical determinism, which finally pushes the idea of a powerful will (as the basis of normativity) beyond the limits of science (and rationality in general).

In a new perspective, an unusual and previously unknown world opens up before a person, which is governed by a single universal set of causal laws that allow precise mathematical expression. However, the law is only perceived by us as the truth, excluding the possibility of all contradictory provisions, when a higher authority's sanction is sanctified. Science claims both higher knowledge and higher power simultaneously and becomes such an authority in the "new world."

The basis of science's claims to the role of the highest authority is the fundamental belief that the causal order prevailing in the world makes it possible (subject to specific logical and



methodological procedures) to accurately and unambiguously correlate every phenomenon with all previous and subsequent ones.

From a causal perspective, the unpredictability of certain events is considered a purely epistemological phenomenon with no ontological prerequisites. Nothing that happens occurs without an appropriate reason. Surprises exist only for us and exist only insofar as we have not yet learned all these reasons. We hope to use the cause-and-effect relationships that we already know and have learned to achieve our goals. However, the constant interference in our activities by a mass of patterns still unknown to us leads to the fact that, against our will, we turn into one of the means of manifesting a particular global necessity.

The principle of causality, considered a fundamental ontological characteristic of being, suggests that a person can realize his desire for freedom only by subjecting his life to a universal objective law. To freely manage their future, a person who thinks about causality must exclude everything accidental from consciousness, retaining only the necessary in it. In other words, to be free, a person must become required not only in means, but above all in motives and goals: he must not desire anything that would not be "provided for" by objective necessity. Strict adherence to the causal principle does not allow us to consider our activities entirely autonomous. After all, if any of our actions is the "result" of a multitude of objective and often unconscious factors, it means that our behavior is determined by something beyond our will. "Science, – writes F. M. in Notes from the Underground. Dostoevsky, – will teach a man that... Everything he does is not done according to his will, but by itself, according to the laws of nature. Therefore, these laws should only be discovered, and a person will not be responsible for his actions."

Causal thinking is formed due to a rather lengthy process of radical change in ideas about how the world is ordered. The world of traditional society is dominated by a normative (social) order, which also extends to the entire reality surrounding a person. The New European world is a world of causal (natural-natural) order, to which society and man are now striving to subordinate. This world is literally being created in the formation of European science. It appears to us as a result of a change in the most fundamental ontological ideas about the prevailing order in the world.

One of the most authoritative creators of the new science, Leibniz, believes that the order prevailing in the world is such that "every complete action represents [its] complete cause," therefore, "from the knowledge of this action, I can always come to the knowledge of its cause." (*Leibniz, 1984*) Suppose the cause is "fully represented" in the effect. In that case, it means that the logic of our cognition must be as consistent and continuous as the chain of causal relationships in nature. However, we are talking here not so much about the epistemological as about the ontological principle. Leibniz's belief in the causal nature of the fundamental world order presupposes that all events form a continuous series in which causes and effects are dense, without "gaps," adjacent to each other. The world appears to us as a perfect unity, an integral sequence of phenomena that are not broken at any point. But this position is nothing more than a particular ontological principle, which is implicitly present in the foundation of classical science. According to this principle, all nature is unconditionally subject to mathematically expressed laws, the effect of which is manifested in the immutability of cause-effect relationships. There is nowhere for a person to "squeeze in" here with his free will, the



manifestation of which is always associated with the appearance of a "gap," a break in gradualness.

As a result, an attitude towards nature as a kind of non-historical education is being formed and is becoming widespread. After all, if the complete cause of any phenomenon is represented in it as a full effect, then this means their equivalence. However, the equivalence of cause and effect, in turn, means nothing more than the reversibility of time (at least logically). And suppose we are physically unable to reverse the global process. In that case, it is logically not only possible to make such a backward movement, but it is the direct responsibility of a man of science. The idea of the non-historical nature of scientific laws, which relate primarily to natural processes, is gradually spreading to human existence.

Over the past three hundred years, this Leibnizian "formula" of the fundamental world order has become dominant not only among scientists and philosophers; even in everyday consciousness, there is a firm belief in the immutability of causal laws that organize everything that happens in the world into continuous causal chains stretching from the endless past to the infinite future. However, by the middle of the 20<sup>th</sup> century, among professionals – philosophers, scientists, and methodologists of science – the conviction in the comprehensive nature of the causal world order was losing its former firmness. Disillusionment with the ideals of universal determinism is growing. As a result, the fundamental principles of classical New European rationality are in question – the ontological principle of the unity of the system of rational knowledge. The break with tradition is so acutely realized that Gaston Bachelard characterizes the idea of universal determinism of the Leibniz type as an incredible, monstrous idea (*Bakhtin, 2011*).

And here, as in the case of the formation of the classical ideal, a change in the epistemological perspective and a revision of the ontological foundations are inextricably linked with a change in ideas about the prevailing world order. After all, based on these ideas, our preliminary assumptions about what is truly meaningful in this world are formed. The most fundamental ontological premise of classical science – the existence of nature as the last given, existing "by itself," regardless of our human existence – becomes unacceptable in the new conditions. However, along with the distinction between natural and human existence, the idea of the world as a kind of absolute inseparable unity, subject in all its spheres and manifestations to the same universal causal laws, becomes unacceptable. If, from the point of view of the classical ideal, all relations, both in the sphere of nature and in the sphere of the human life world, were considered as internal relations between the elements of a single and unified system, now it becomes possible to include external influences in the consideration, the action of which destroys the rigid linearity of classical determinism.

The "image of the world" is changing not only due to the natural causal processes taking place in it. A change in the conceptual structure of thinking can give us a completely different structure of the division of being, open up a new perspective in which not only the meaning and significance of familiar things change, but we find ourselves in a new world with other objects and other facts. The principles of structuring of being are now considered not as initially inherent like the world, but as a result of adopting certain meta-paradigmatic attitudes. Choosing a particular concept of world order is a creative act based not so much on discursive reflection



as on a volitional decision, which represents a break in the chain of cause-effect (and logical) relationships. This choice cannot be reduced to any formalized algorithm or deduced from previous history as a consequence of the cause. From the point of view of classical rationality, this is an irrational act. However, we may be talking here not so much about irrationality but rationality of a different, non-classical type – the rationality of "collective behavior." In any case, we are talking about choosing a particular model of community life.

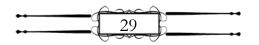
However, unlike the causal order of classical rationality, the normative world order is no longer considered either an absolute and eternal characteristic of being and thinking itself or the result of the action of some powerful transcendental domineering will. This order is understood as established or recognized by people, not by superhuman authority. It therefore has normative force only within the boundaries of a particular cultural community or historical epoch.

The internal difference between causality and normality as principles of the organization of the world order is primarily as follows. In the causal perspective, every phenomenon is considered as a consequence of some cause and at the same time as the cause of some other effect, therefore, the causal chain is represented as a continuous line, not broken anywhere, starting from infinity and going to infinity. The normative perspective, unlike the causal one, presupposes a well-defined beginning – the very creative act of free choice of a meta-paradigm setting, which sets the boundary conditions for the functioning of not only a particular type of thinking, but also the life of the social organism itself as a whole. In this fundamental difference between causality and normativity, the opposition between the prevailing necessity in nature and human freedom is rooted. The fact that a person is free means that he can, by approving certain norms, act as the initial (first) link of a particular causal series. When deciding on this kind, he acts as the cause of the effects, not the consequence of the causal tradition.

The causal series unfolds as a smooth transition from one possible world to another. The act of freedom is a break in gradualness, which irreversibly transports us to another world, immediately created by this act itself. Here, we are not talking about the reason, but rather about the fault. We are responsible for this transition, we created this world, and we are responsible for the fact that it now exists. At the same time, guilt is understood not in a moral and evaluative sense, but in an ambivalent (metaphysical) sense, because the birth of good or evil from our act is equally likely. Therefore, responsibility here does not mean punishment, but the consciousness of one's active participation in life and involvement in being.

#### Conclusion

Thus, after several centuries of persistent attempts not only to create a science of nature based on the idea of a purely causal order, but also to build on its basis a completely value-free "social physics," we conclude that it is impossible to reduce the normative order to the causal ultimately. However, completely immersing the causal order in the normative one seems just as untenable. The main thing here is the awareness of the complexity and diversity of the world and, consequently, the impossibility of finding any unrealistic "master key" method that works equally effectively in both the natural and socio-humanitarian spheres. Most likely, it should be recognized that two fundamental metaphysical principles interpret the nature of human actions in different ways. The metaphysics of causality considers them consecutive links of a particular



universal series. Freedom is understood here as strictly following this series, any deviation from which is interpreted as an absolute evil. The metaphysics of normativity prefers to consider human actions as independent acts of realization of freedom, for each of which a person bears full responsibility.

#### **Conflict of interests**

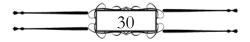
The author declares no conflict of interest.

#### **References:**

- Balakhonsky, V. V. (1997). Explanation of history: historical, philosophical, methodological, and epistemological aspects. St. Petersburg, Penza: Russian State Pedagogical University named after A.I. Herzen; Penza State Pedagogical University named after V.G. Belinsky. (In Russ.)
- Bakhtin, M. V. (2011). *Models of history: a socio-anthropological analysis*. Moscow: Institute of Business Communications. (In Russ.)
- Bashlyar, G. (1986). Rational determinism and technical determinism. *Philosophy and Sociology of Science and Technology*, 230-236. Moscow. (In Russ.)
- Berger, P., & Lukman, T. (2009). The social construction of reality: A treatise on the sociology of knowledge. Moscow: Madium. (In Russ.)
- Bransky, V. P. (2006). The problem of the meaning of history. *Art and Philosophy*, 582-608. Kaliningrad. (In Russ.)

Kline, M. (1984). Mathematics. Loss of certainty. Moscow: Nauka. (In Russ.)

- Leibniz, G. (1984). Essays (Vol. 3). Moscow: Nauka. (In Russ.)
- Losev, A. F. (Ed.) (1979). Diogenes Laertius. About the life, teachings, and sayings of famous philosophers. Moscow: Nauka. (In Russ.)
- Prigozhin, I. (1989). Science, civilization and democracy. *Philosophy and Sociology of Science and Technology: Yearbook*, 7. (In Russ.)
- Rozhansky, I. D. (Ed.) (1989). Fragments of early Greek philosophers. Part 1. From epic cosmogonies to the emergence of atomistics. Moscow: Nauka. (In Russ.)



#### Konstantin O. Chedia<sup>[4]</sup>

#### The potential of human consciousness [3]

*Abstract:* The systematic application of dialectical methodology makes it possible to identify the causeand-effect foundations of not only the past, present, but also the future evolution of Being, the essence of which is the gradual harmonization of all its levels in a mirror-symmetrical sequence of the following nine stages. The meaning of the evolution of Being as a whole consists first in creating conditions for the emergence of living matter and its consciousness during the early evolution of inanimate matter, then reaching the qualitative limit by the consciousness of "people" on its centers (sustainable reproduction of objective values based on the ideal of Harmony and objective knowledge through the complete application of dialectical methodology based on the self-sufficiency of empirical data) with the subsequent gradual harmonization of all levels of Being to a system of interaction between universes and hypothetical anti-universes (outside of the theoretical postulation of which the evolutionary nature turns out to be inexplicable and the future of humanity in the conditions of inevitable exhaustion of energy turns out to be pessimistically disastrous). Meanwhile, the potential of human consciousness is the top of the evolutionary pyramid, providing an optimistic finale to the evolution of Being.

*Keywords:* dialectical methodology, emergence, culmination, elimination of the system of epistemological and ontological opposites, phases and stages of the evolution of inanimate and living matter.

#### Introduction

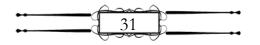
When biologists, and especially astrophysicists and cosmologists, talk about the distant prospects of humanity, they, thinking in terms of millions and even billions of years of (broadly already understood) evolution of inanimate and living matter, as well as the modern immensity of the Universe, come to the sad conclusion that the appearance of humanity on a "tiny" Earth is "a tragic farce," consisting in the inevitability of the death of humankind from:

- the natural degradation of people in the absence of an obsolete biological struggle for existence (in tens of thousands of years),
- the inevitability of the death of the Sun, as well as any star (in units and tens of millennia),
- the inevitability of the upcoming expansion (and cooling) or compression (and fiery collapse) of the Universe (in billions of years).

In this case, people are given the role of knowing the irremediable causes of their supposedly inevitable impending death.

Meanwhile, the above "fundamental" arguments are profoundly erroneous, since they do not consider the main evolutionary pattern – its implementation precisely at the top of the evolutionary pyramid.

In the previous two articles, this pattern was illustrated by the example of the evolution of living matter on Earth: the dominance of single-celled microorganisms at the stage of biochemical evolution was replaced in strictly mathematical terms by the dominance (first of extra-skeletal, then intra-skeletal, and finally cephalizing) animals at the stage of biological evolution and, finally, the supremacy of abstractly thinking people at the stage of (cultural) social evolution, consisting of 3 (pre-antagonistic, antagonistic, post-antagonistic) phases and nine stages based on changes in priorities of ethical (community-command-administrative), economic (market) self-regulation. Moreover, in these articles it was hypothesized that in the



2030s (the deadline for completing the acceleration of the evolution of living matter by the coefficient  $e \approx 2.71...$  / the number of Nepera/, on Earth  $ke \approx 2.67...$ , that is, with some delay due to increased seasonality) accelerating ontological and epistemological self-regulation, when the evolving consciousness of people adapts to an objectively contradictory existence based on its inconsistency, will be replaced by a slowing one epistemological and ontological self-regulation, when the mature consciousness of people, overcoming its inconsistency, begins to gradually harmonize Existence based on the sustainable reproduction of the unity of objective values and objective knowledge, starting with the centers of evolution of living matter.

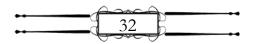
#### Results

This article raises the question of the humanistic and creative perspectives of human consciousness (based on insight into the past and future evolution of inanimate matter) even more expansive.

The meaning of the evolution of Being is that:

- The first meta-stage (two macro-stages of three stages each with accumulation and three stages with resolution of the crisis of contradictions between opposites) of the evolution of objects of inanimate matter ends with the creation of conditions for the emergence of subjects of living matter and their consciousness (on planets of the 2<sup>nd</sup> and 3<sup>rd</sup> generations, characterized by the presence of three aggregate states of matter, the electroneutrality of cosmic macro objects and the presence of states of relative rest);
- The second meta-stage (two macro-stages, also with the accumulation and resolution of the crisis of contradictions between opposites) of the evolution of subjects of living matter ends with the achievement of the qualitative limit of the evolution of the creation of abstractly thinking people, consisting first in the theoretical and then in the practical reproduction of the unity of objective values and objective knowledge, respectively, first in the scientific and then in the general consciousness of people of mature age gradually harmonizing their centers of evolution of living matter;
- The third meta-stage (with two macro-stages) of the evolution of not only living, but also inanimate matter consists in the step-by-step harmonization of Being, first at the level of the Universe, and then... the entire system of universes and anti-universes through the efforts of their living matter, which naturally achieved sustainable reproduction of the humanistic and creative quality of its consciousness.

We modern people do not and cannot have empirical knowledge about such a distant future. But on the other hand, we can gain this knowledge theoretically based on understanding the patterns of past evolution with their mirror-symmetric extrapolation into the future. This is precisely what was done in previous articles regarding the past, present, and future of living matter. Now, the horizons of dialectical analysis can be expanded from the hypothetical Big Bang to the hypothetical completion of the entire mega-stage of the evolution of Being. This approach reveals the meaning of the mega-stage of the evolution of Being, which consists in the fact that in a system of gradual emergence, development, culmination, elimination and removal of its opposites, conditions are created for the emergence (based on organic chemistry) of living matter and, most importantly, its consciousness. Then, based on abstract thinking, the



evolution of consciousness reaches its qualitative humanistic and creative limit – the sustainable reproduction of the unity of objective values and objective knowledge in the centers of the evolution of living matter, and on this basis, a phased harmonization of Existence will be performed throughout the system of universes and anti-universes.

The Big Bang is not an "idealistic" emergence of a colossal portion of energy from "nothing" (supposedly creation!) and it is not a "materialistic" pulsation (in expansions and contractions) that exists forever (do not understand where it came from!) energy. The Big Bang is a dialectical transition of the "zero state of Being", characterized (according to modern relativity theory) by the absence of both time and space, into a state of opposite energy with hypothetical anti-energy, similar to the emergence of an infinity of pairs of electrons and positrons from specific portions of energy (or hypothetically anti-energy) with the possibility of annihilation with the emergence of the same portions of energy (or anti-energy). Consequently, the Big Bang is the emergence of not one Universe, but at least a pair of the universe and the anti-universe, which theoretically thoroughly explains the evolutionary origin of energy. The question arises: why only couples? Once upon a time, people (purely on empirical grounds) thought that the Earth was one, the solar system was one, the galaxy was one, and the metagalaxy was one... And now it seems that the universe is one. In reality, every time people face a new level of infinity, the same principle is inevitably realized with pairs of universes and antiuniverses (maximal physical formations), which are as quantitatively infinite as pairs of electrons and positrons (minimal physical formations) arising and annihilating in any region of space.

Each dual macro-stage of the evolution of Being (matter "with us" and anti-matter "with them") consists of three macro-stages (three stages each) of accumulation of contradictions and three macro-stages (three stages each) of removal of these contradictions, as observed in the analysis of the evolution of living matter. Thus, the evolution of inanimate matter consists of 6 stages, the first three of which are almost hidden from modern empirical observations based on the grandiose relativistic discrepancy between the slow-motion (gravity of the Universe and, in particular, the Solar System) course of modern terrestrial time and the primary fastest current (which has just begun to slow down after the state of simultaneity of the event) "of its time" in the early Universe (with a minimum level of gravity). Today, we observe cosmic microwave background radiation based on modern Earth's time. Therefore, it seems to us that significant events in the early universe occurred in astronomical fractions of seconds. On the other hand, based on identifying the dynamics of the timing of the evolution of living matter, it opens up the possibility of extrapolating these dynamics into the past by discovering the timing of the "own" (gradually slowing down) time of the Universe. As the universe accumulates mass and gravity, the difference between its time and Earth's time is reduced to a minimum. It is necessary to consider the macro-stage and the stage (with their timing) of the early evolution of inanimate matter:

- A macro-stage of the ontological self-development of inanimate matter before reaching the culmination of ontological opposites:

• The emergence stage of bosons – massless subatomic particles of radiation <10-32 s. Earth time; 3.5 billion years of "its" slowing time, which thoroughly explains cosmological inflation – the enormous growth of the Universe during this time>;



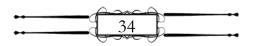
- The stage of the emergence of fermions and anti-fermions, subatomic particles with mass, with a three-phase priority of either the negative charge of leptons, the positive charge of quarks, or the negative charge of leptons again, and with the beginning of the displacement of anti-matter, which temporarily maintains the electro-neutrality of the Universe, as complex structural fermions bonded by bosons arise replacing positively charged (and temporary) antimatter burning out in the universe <10 seconds of Earth time; 2 billion years of "its own slowing time">;
- The stage of the emergence of protons and neutrons (hydrogen and helium) paired with anti-protons and anti-neutrons (anti-hydrogen and anti-helium) in violent mutual births and annihilations with a three-phase priority of negative and positive charge and with a nine-stage priority of strong and weak nuclear interactions <3 minutes of Earth time; 0.1 billion years of "its own slowing time">.

– Macro-stage of the ontological self-development of inanimate matter of the primary removal of ontological opposites on the planets of the  $2^{nd}$  and  $3^{rd}$  generation of star-planetary systems:

- The stage of the emergence of protons and neutrons with complete antimatter burnout in the Universe (due to the achievement of the electro-neutrality of the Universe based on the balance of negatively charged simple electrons and positively charged composite protons) <0.1 billion years of "its own decelerating time", already approaching close to modern Earth time due to the accumulation of the mass of the Universe, close to the contemporary value>;
- The stage of chemical evolution, which takes place in three phases of local contraction of hydrogen-helium nebulae (the phases of the so-called "dark ages"), the formation of the entire system of chemical elements in the outbursts of superstars of the first generation and the formation of the whole of atomic and molecular system of substances of inorganic chemistry (metals amphoteric substances nonmetals inert gases; metal oxides amphoteric substances non–metals; acids bases salts, etc.) <2.3 billion Earth years>;
- The stage of cosmological evolution, which consists in achieving on the planets of the star-planetary systems of the 2<sup>nd</sup> and 3<sup>rd</sup> generation with the presence of three aggregate states of matter and a state of relative rest as a possibility for the further emergence of biochemistry, and consequently, the evolution of consciousness of living matter <3.5 billion Earth years>.

Of course, this information is little accessible to representatives of the natural and social sciences, but it is precisely this information that gives an idea of the future harmonization of Being by the transformative, mature humanistic, and creative consciousness of the "people" of universes and anti-universes.

After the completion of the promising three-stage harmonization of the centers of evolution of living matter discussed in previous articles, a large-scale period of feasible harmonization of inanimate matter by "people" will begin, without which living matter would indeed inevitably perish. However, once again, the evolution of Existence occurs only at the top of the evolutionary pyramid, which is a promising humanistic and creative consciousness of



living matter. Therefore, based on the understanding of the meta- and macro-stages (six stages) of the past evolution of inanimate matter, we can safely assume the presence of a macro-stage (six stages) of the future harmonization of inanimate matter after the still promising implementation by humans of the harmonization of the foci of the evolution of living matter.

- The macro-stage of the harmonization of inanimate matter before reaching the secondary culmination of ontological opposites:

- The stage of contacts between the humanistic and creative civilizations of the Universe (mirror-symmetrical cosmological evolution) consists in combining the humanistic and innovative potential of the consciousness of "people" in joint adaptation to the problematic cosmological conditions of the Universe with the task of at least settling and optimizing new stellar and planetary systems with transfer to them (on the eve of the death of their stars) purposefully harmonized biosphere <3.5 billion Earth years>.
- The stage of harmonization of the regions of the Universe based on its resources (mirror-symmetrical to the stage of chemical evolution) will be carried out in three phases of geophysical (atmospheric, lithospheric, hydrosphere) preparation of inhabited planets, filling and harmonization of their biosphere with subsequent resettlement of "people" on them. This will be the most difficult (middle) stage of the intra-universe harmonization of Existence in conditions of a secondary increase in the severity of its contradictions: the resources of the Universe are not unlimited, starting with the natural death of stars and the depletion of energy resources of planets, therefore, "people" will inevitably face the question of the evolutionary nature of energy to obtain it in practice <2.3 billion Earth years>;
- The stage of theoretical understanding of the evolutionary nature of energy with access to the problem of artificial energy production in interaction with anti-universes (in mirror symmetry with the stage of the emergence of protons and neutrons with complete burnout in the antimatter Universe). Presumably, this will be a three-phase and nine-stage stage of penetration into the world of high temperatures and establishing informational contact with the anti-universe (most likely, based on the fluxes of electrons and positrons, the simplest fermions and antifermions that can exist both in energy conditions and in conditions of hypothetical anti-energy) <0.1 billion earth years>.

- A macro-stage of harmonization of inanimate matter to the secondary feasible removal of contradictions between its ontological opposites:

- The theoretical practical energy production stage in interaction with the "people" of anti-universes (in mirror symmetry with the stage of the emergence and annihilation of protons and neutrons with antiprotons and antineutrons). Presumably, this will also be a three-phase and nine-stage stage (according to the three pairs of gravitational-inertial, electromagnetic /+ and -/ and nuclear /strong and weak/) interactions in informational contact with the "people" of anti-universes <0.1 billion Earth years>.
- The stage of achieving reproducibility of universes and anti-universes (in mirror symmetry, the stage of harmonizing the regions of the Universe based on its resources) will presumably be carried out in three phases of setting up energy "furnaces" in the



inner spheres of universes and anti-universes, arranging star-planetary systems in their middle parts and disposing of spent matter (antimatter) in their external spheres. This will be the most difficult (middle) stage of the outer universe harmonization of Existence in the context of the ongoing expansion of universes and anti-universes, which will make the problem of achieving their stationarity <2.3 billion Earth years> urgent;

• The stage of achieving stationarity of universes and anti-universes (mirror-symmetrical to the stage of contacts between humanistic and creative civilizations of the Universe) consists in achieving optimal density and maximum sizes of universes and anti-universes, ensuring their stationarity (similar to the minimum sizes and stationarity of electrons and positrons).

# Conclusion

*Thus*, the meaning of the mega-stage of the evolution of Being can be expressed even more briefly. The meaning of the mega-stage of the evolution of Being is that, according to the laws of dialectics, the evolution of objects of inanimate matter is carried out, the result of which is to create conditions for the emergence of subjects of living matter and, most importantly, the evolution of their consciousness. The achievement of the qualitative limit of consciousness of living matter (the stability of reproduction of the unity of objective values in the minds of all "people" of mature age) unfolds evolution in the direction of gradual harmonization of Being: both living and inanimate matter (anti-matter) (also based on the laws of dialectics, according to the program of evolutionarily formed not only theoretical, but also aesthetic thinking as a full-fledged application of the bipolarity of emotional perception to all objects and phenomena of Being /being and consciousness /).

The human brain is the pinnacle of the evolution of Existence. It is able to reproduce itself, adapt to the temporary inconsistency of social evolution (with an adaptive degree of aggressiveness), and then become the basis for the harmonization of Being, mirror-symmetrical to its entry into the culmination of inconsistency. Harmonization has its limits.

Thus, full-fledged Harmony is achieved only at the top of the evolutionary pyramid - in the minds of mature people after passing through two macro-stages of social evolution, and therefore in their humanistic-creative (entirely harmonious) relationships.

At the biological level, the problem of life and death will remain practically unsolvable for humans. No matter how people learn to prolong their individual lives, for example, for centuries, they will remain mortal and simultaneously (at a high level of culture) aimed at transferring cultural experience to new generations. As for the harmonization of animal life, we are talking about relative harmonization depending on their evolutionary level, where people will multiply the number and quality of life than animals (significantly higher), continuing to receive industrial benefits from them.

As for cosmological problems, they will forever remain harsh for people, relatively overcome by the growth of space technology. Therefore, concerning the natural and exact sciences, we are talking only about "feasible" harmonization aimed at the benefit of humans and, to a large extent, (mainly higher) animals. In dealing with the astrophysical world, heroic thinking will always be in demand in people's minds, requiring people to perform feats at the



risk of their lives. Therefore, not only non-pragmatic scientific thinking will continue to disintegrate into contradictory empirical and theoretical thinking, but also non-pragmatic value thinking will always disintegrate into aesthetic and heroic, with the elimination of the latter only within social relations in adulthood.

Finally, it is possible to speak most briefly about the goal of the mega-stage of the evolution of Being – to replace a once-contradictory phylogeny (and there can be no other phylogeny as "self-development") with a once-achieved consistent (biological and, most importantly, cultural) ontogenesis, the organization of which for cultured people is the highest happiness in life guaranteed by evolution.

# Conflict of interests

The author declares no conflict of interest.

# **References:**

Chediya, K. O. (2020a). The evolution of matter (Vol. 1. Evolution of the biosphere). (In Russ.)

Chediya, K. O. (2020b). The evolution of matter (Vol. 2 Evolution of the noosphere). (In Russ.)

Chediya, K. O. (2020c). *The evolution of matter* (Vol. 3. Evolution of matter of the Universe (hypothesis)). (In Russ.)

Chediya, K. O. (2020d). *The evolution of matter* (Vol. 4. Mathematical model of the evolution of highly organized matter). (In Russ.)

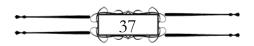
Chediya, K. O. (2020e). The evolution of matter (Vol. 5. The Hypothesis of Everything). (In Russ.)

Chediya, K. O. (2020f). The evolution of matter (Vol. 6. Dialectics is the methodology of science). (In Russ.)

Chediya, K. O. (2020g). The evolution of matter. Popular science presentation of the dialectical concept of the evolution of matter. Tver: SFC-office Publishing House. (In Russ.)

Panov, A. D. (2005). Completion of the planetary cycle of evolution? *Philosophical Sciences*, 3-4, 42-50. (In Russ.)

Zhirmunsky, A. V., & Kuzmin, V. I. (1990). Critical levels in the development of natural systems. Leningrad: Nauka. (In Russ.)



# Consumption, food habits and potential pathological profiles in the population of the District of Abidjan<sup>[4]</sup>

Abstract: Dietary habits play a crucial role in a person's overall health, and their impact on disease patterns within the population is a growing public health concern. The main purpose of this study is to analyze the dietary habits of the Ivorian population from the angle of domestic consumption and consumption outside the home and establish trends in the most frequent pathological profiles in the Ivorian population. A descriptive cross-sectional study was conducted using a questionnaire comprising several sections. The latter included information on age, sex, anthropometric parameters, eating behaviours, food frequencies, and energy value of the household food ration. The population studied had a weight of  $54.59 \pm 9.17$  kg and an age of  $28.11 \pm 2.64$  years. The average population size is  $1.48 \pm 0.45$  m and the average BMI is  $22.71 \pm 5.56$  (kg/m<sup>2</sup>). It is observed that 6.06% of cases of thinness, 45.86% of normal build, 19.29% of cases of overweight and 21.12% of cases of obesity. Several household lifestyle habits expose them to overweight, obesity and other risks of nutritional factors. Most households (81.75%) have a balanced weekly consumption of different food groups. The average food ration of the population is  $2549.86 \pm 444.33$  kcal. Nearly half of the population (50.7%) were declared to have a pathology and a medical history.

Keywords: food habits, pathological profiles, population, District of Abidjan.

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# Consommations, habitudes alimentaires et profils pathologiques potentiels dans la population du District d'Abidjan

Resume: Les habitudes alimentaires jouent un rôle crucial dans la santé globale d'une personne, et leur impact sur les profils pathologiques au sein de la population est un sujet de préoccupation croissante dans le domaine de la santé publique. L'objectif général de cette étude est d'analyser les habitudes alimentaires de la population ivoirienne sous l'angle de la consommation domestique et la consommation hors domicile et établir les tendances des profils pathologiques les plus fréquents dans la population ivoirienne. Une étude transversale descriptive a été menée par le biais d'un questionnaire comportant plusieurs sections. Ce dernier comprenait des informations sur l'âge, le sexe, les paramètres anthropométriques, les comportements alimentaires, les fréquences alimentaires, la valeur énergétique de la ration alimentaire des ménages. La population étudiée présente un poids de  $54,59 \pm 9,17$  kg et un âge de 28,11  $\pm$  2,64 ans. La taille moyenne de la population est de 1,48  $\pm$  0,45 m et L'IMC moyen est de 22,71  $\pm$  5,56 (kg/m<sup>2</sup>). Il est observé 6,06% de cas de maigreur, 45,86 % de corpulence normale, 19,29% de cas de surpoids et 21,12% de cas d'obésité. Plusieurs habitudes de vie des ménages les exposent au surpoids, à l'obésité et d'autres risques de facteurs nutritionnels. La plupart des ménages (81,75%) ont une consommation hebdomadaire équilibrée des différents groupes d'aliments. La ration alimentaire moyenne de la population est de 2549,86 ± 444,33 kcal. Près de la moitié de la population (50,7%) ont été déclarés porteurs d'une pathologie et avant des antécédents médicaux.

Mots clés: habitudes alimentaires, profils pathologiques, population, District d'Abidjan.



# Introduction

Dietary habits play a crucial role in a person's overall health, and their impact on disease patterns within the population is a matter of growing public health concern (*Biscontin, 2018*). In Côte d'Ivoire, a country, characterized by cultural diversity and gastronomic richness, traditional eating habits are at the heart of daily life (PNMIN, 2015). However, the Ivorian population is facing profound transformations in its diet, which reflect a remarkable dietary transition, with the rapid evolution of lifestyle and social and economic factors (*David et al., 2019*). The dietary transition involves introducing processed food products and the increasing influence of Western diets, characterized by a high proportion of fat, added sugars and a high salt content (Janin, 2019). This change in eating habits comes with many potential nutritional risks. The problem that emerges from this food dynamic is based on the paradoxical coexistence of malnutrition in all its forms (WHO, 2021). On the one hand, the persistent prevalence of undernutrition, particularly among vulnerable groups such as children and pregnant women, poses a continuing public health challenge. On the other hand, the nutritional transition is accompanied by a worrying increase in diseases linked to an unbalanced diet, such as cardiovascular diseases, diabetes and obesity (Plan National Multisectoriel de Nutrition, 2016). Additionally, rapid urbanization, rising incomes and the increasing availability of fast food have led to a decrease in the consumption of traditional foods and an increase in the consumption of ready-to-eat foods, often rich in empty calories and low in essential nutrients (Kouassi et al., 2022; Dolislager et al., 2022). It is significant to note that these potential nutritional risks specifically affect different categories of the Ivorian population. The most vulnerable groups include children, pregnant and lactating women, the elderly, and low-income populations (Plan National Multisectoriel de Nutrition, 2016). In order to understand this complex dynamic, it is imperative to analyze the socio-economic, cultural and environmental factors that shape dietary habits and, therefore, influence the health of individuals. The general objective of this study is to analyze the dietary habits of the Ivorian population from the angle of domestic consumption and consumption outside the home and establish trends in the most frequent pathological profiles in the Ivorian population.

## Methodology

A descriptive cross-sectional study took place in the municipalities of the District of Abidjan: Abobo, Adjamé, Anyama, Attécoubé, Bingerville, Cocody, Koumassi, Marcory, Port-Bouët, Treichville and Yopougon. These sites were selected by the INS (National Institute of Statistics) in Ivory Coast. A face-to-face interview was performed with the respondents to ensure a good understanding of all the questions (*Dop et al., 2003*). The interrogation was followed by anthropometric measurement. A representative sample of the urban and rural population is envisaged to reflect the diversity of eating habits. It is with this in mind that the choice of a two-stage stratified random sampling is best indicated in the Abidjan District. Thus, 40 enumeration zones spread across the 11 municipalities were selected to be enumerated and then 25 households were selected by a systematic drawing in each enumeration zone.

A structured questionnaire was used to capture information on socio-demographic characteristics, dietary habits and eating behaviors of household members. Anthropometric parameters measured included height (m), weight (kg), and body mass index (BMI). Body mass



index (BMI) was calculated from the subject's weight and height,  $BMI = Weight (kg)/height^2$  (m<sup>2</sup>) (*OMS*, 2003).

Concerning the estimation of the quantity of food, the method used was that of the quantitative dietary survey by interview (*Dop et al., 2003*). Diet composition is calculated using West African food composition tables. This table gives for each product the composition of 100 g according to the different nutritional elements. Metabolizable energy values for all foods are provided in Kilocalories (Kcal). They were calculated from the values of proteins, lipids, total carbohydrates and fibers by applying the energy conversion factors (11): Energy (Kcal/100g) = (% Protein  $\times$  4) + (% Lipid  $\times$  9) + (% Total Carbohydrates  $\times$  4) + (% Fiber  $\times$ 2).

An interview protocol was designed to collect data on eating habits, medical history and possible diet-related pathologies on a representative sample. Any medical history, general health of the individual and possible diet-related diseases (diabetes, cardiovascular diseases, night blindness, etc.) were identified. The data was entered and coded in Excel. Data analysis was performed using XLSTAT 2016 software. Appropriate statistical methods to analyze the qualitative and quantitative data from the interviews, such as descriptive analyzes were performed.

## Results

The study involved 927 households with an average size of 4 members per household. Of the 927 households, 60.5% were headed by men and 39.5% by women. Among the heads of households, 59.4% were married, 63.84% were educated and 84.15% resided in urban areas. The average age of heads of households is  $32.80 \pm 11.17$  years. More than half of heads of households are self-employed (50.49%) (*Table 1*). Structuring the population surveyed according to sex gives 1763 women and 1945 men, i.e. a sex ratio of 1.10 with an average age of 28.11  $\pm$  2.64 years. The population studied is made up of 572 children (0 to 9 years old) or 15.44% of the total number. There were 649 adolescents aged between 10 and 17 years old, representing 17.51% of the sample and 18.77% of young people aged between 18 and 25 years old, with a total of 696 people. Adults and the elderly were represented in the sample with respective percentages of 40.84% and 7.44%.

On average, the average weight and age of the population is  $54.59 \pm 9.17$  kg and  $28.11 \pm 2.64$  years. The average population size is  $1.48 \pm 0.45$  m and the average BMI is  $22.71 \pm 5.56$  (kg/m<sup>2</sup>) (*Table 2*). Table 3 shows that 5.94% of the population is in a state of severe and moderate acute malnutrition (*Table 3*). There are 6.06% cases of thinness (BMI<18.5 kg/m<sup>2</sup>) of which 2.77% are male and 3.29% are female. It is presented that 45.86% of the population has a normal build (between 18.5 and 24.9 kg/m<sup>2</sup>). The proportion of excess weight in the population reaches 19.29%, with 8.47% of boys and 10.82% of girls. Class I (moderate) obesity is presented by 13.07% of the population, of which 4.33% are boys and 8.74% are girls. Severe obesity is only presented by 4.57% of girls and 1.72% of boys; while morbid obesity is 3.48%. During this survey, questions were asked about the general state of health of the individual and the identification of possible diet-related illnesses. Nearly half of the population (50.70%) were declared to be carrying a pathology and having a medical history whose age ranged from 5 to



85 years while 49.3% of the population were declared healthy. The majority of respondents affected by these pathologies were adults and elderly people (*Table 4*).

Most individuals in the sample usually eat three times a day: morning, noon and evening. Nearly 70.93% of people had taken the three main meals the day before the survey, 23.7% had taken two, 3.57% had taken four and the prevalence of those who eat only one meal per day is 1.8%. Concerning staggered schedules, more than two-thirds of the population (68%), household members eat at staggered schedules several times a week (*Figure 1*). Snacking is observed in both sexes, but the prevalence is higher among women (44.32%) than among men (31.7%). Most household members (82.4%) had the habit of eating two meals away from home and one meal at home; 13.9% eat two meals at home and one meal out, while 3.7% say they never eat out. The day preceding the interview, 94.11% of households reported having consumed food in eating places such as kiosks, maquis, restaurants, and street stands and 2.19% consumed in canteens. Regarding food sharing within the household, it is interesting to note that 11.86% of household heads share a meal; 25.01% of children are served in groups of two or three children per dish, depending on the type; 5.5% of household members take their meals as a group and 57.63% of household members do not share their meals (*Figure 1*).

The duration of meal consumption by household members varies depending on the meal consumed but is generally very short. During the week, breakfast time is 5 to 15 minutes for 72% of households, 15 to 30 minutes for lunch (66%) and dinner (58%). Almost all households report consuming juices, sugary drinks and soft drinks daily, including 89% at least once a day and 11% at least three times per day. However, this consumption during meals generally remains low (39.58%). The survey shows that the majority of households surveyed (68.25%) consume alcoholic beverages and 31.75% do not consume them. The majority of individuals in the sample (39.12%) frequently consume beer and 6.62% consume wine at least once a day; while, 20.75% consume alcohol 3 times a week, and 1.76% take Dolo (*Figure 1*). Regarding the consumption of sugar and salt, 41.08% of the population declare that they frequently add salt and sugar to foods or drinks that are already sweet or salty, while 26.55% only add it occasionally and 32.36% rarely or never add any. As for tobacco consumption, only 2.78% consume tobacco such as cigarettes and 97.22% do not consume it. In the entire population studied, 42.05% practice physical activity while 57.95% do not. Girls (4.49%) are less active than boys (37.56%).

Most households report eating a balanced diet (81.75%). This result was confirmed by the weekly consumption of the different food groups. Indeed, 68% of members consume dairy products, 73% consume fish/seafood, 12% do not consume eggs, 77% of households consume meat and 51% offal. It is worth noting that 85% of households consume vegetables twice a day and 66% consume vegetables twice a day (*Figure 2*).

The average food ration of the population is  $2549.86 \pm 444.33$  kcal. The average daily energy intake provided by foods consumed by the different age groups are respectively 2105.81  $\pm$  401.79 kcal for children, 2428.15  $\pm$  465.99 kcal for adolescents, 2701.98  $\pm$  584 .85 kcal for young people, 2940.89  $\pm$  167.24 kcal for adults and 2572.48  $\pm$  601.78 for the elderly (*Table 5*). The average quantities of macronutrients in energy intakes are reported in Appendix (*Table 6*). These quantities depend on age groups. It appears from this study that the average macronutrient intakes of the population are 344.945  $\pm$  130.78 g for carbohydrates, 93.949  $\pm$ 24.330 g for proteins and 80.254  $\pm$  18.77 g for lipids. The carbohydrate consumption of the



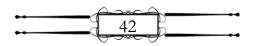
elderly is higher than that of other age groups. The contents of carbohydrates, proteins and lipids as a percentage of the ratio compared to the recommended nutritional intakes (ANC) of the typical groups of the Ivorian population are presented in the Appendix (*Figure 3*). The carbohydrate and protein intake of each group is higher than the recommended intakes except in children (14.9% for proteins). However, the lipid intake of all typical groups is lower than the recommended intake.

# Discussion

The food consumption of populations, characterized by the shape of the food pyramid, increasingly constitutes an element of nutritional risk assessment. This representation nevertheless remains limited if the individual consumption characteristics are not considered. The general objective of this study is to analyze the dietary habits of the Ivorian population from the angle of domestic consumption and consumption outside the home and establish trends in the most frequent pathological profiles in the Ivorian population. The District of Abidjan constitutes the first large urban agglomeration in Côte d'Ivoire which, moreover, integrates local rural entities. The total sample is 3708 people with a structure of 47.55% women and 52.45% men and the average household size of the study is four members. These results are similar to those observed in the General Population and Housing Census (RGPH) where the Autonomous District of Abidjan had an average of 4.5 people per household, 52% men and 48% women. It appears that the population studied is young with an average of 28.11  $\pm$  2.64 years. These results are similar to those obtained by the National Institute of Statistics in Côte d'Ivoire which at the end of their survey demonstrated that 75.6% of the population is under 35 years old. Indeed, Côte d'Ivoire is experiencing rapid demographic growth, with a high birth rate and a high proportion of young people in its population (Stratégie Nationale..., 2021).

According to the nutritional assessment in children, 5.94% of the population is in a state of severe acute malnutrition (SAM) and moderate (MAM). These results are different from those obtained by the INS (*Enquête par grappes..., 2017*). Indeed, this study stated that the percentage of wasted children in the city of Abidjan is 5.3%. At the adult population level, a percentage of 6.06% of cases of malnutrition are recorded, of which 2.77% are males and 3.29% are females. These observations could be the consequences of dietary habits. Indeed, it appears from this study that only 23.7% of the population studied consumes two meals per day. This remark could also be due to socioeconomic variables. Furthermore, these claims prove that the consumption level of certain people does not cover their nutritional needs, hence the appearance of deficiency diseases. Overweight and obesity are more pronounced among women with a prevalence of 27.61%. This difference could be explained by the percentage of snacking and fat consumption. Indeed, in this study, 44.32% of women have the habit of snacking. These results are higher than those obtained by the STEPS survey, which stated that, in Abidjan, 36% of women are overweight compared to 23.7% of men (*STEPS, 2005*).

The regularity of meals and their duration makes it possible to understand different eating behaviours. Among our population, nearly 70.93% of people had taken the three main meals the day before the survey, 23.7% had taken two, and 3.57% had taken four meals. and the prevalence of those who eat only one meal per day is 1.8%. These different meals provide energy



which will be used to benefit households; Skipping the morning or midday meal has a direct impact on snacking (*De Jaeger, 2016*).

The day preceding the interview, 94.11% of households reported having consumed food in eating places such as kiosks, maquis, restaurants, and street stands and 2.19% consumed in canteens. Therefore, most households eat away from home and generally consume quick meals. These are foods, being fatter and more refined, to give a better taste to attract the customer and more calories, promoting weight gain, hypertension and other nutritional diseases (*McDonald, 2007*).

In our population, 81.75% of respondents think they eat a balanced diet, 18.25% of them consume unbalanced meals and this increases the risk of contracting certain diseases such as obesity. Indeed, obesity can be caused by a poor diet. The latter must be diversified and above all balanced. It is also a means of protection against diabetes and heart disease, obesity and excess cholesterol. The most harmful eating habits are the consumption of foods rich in sugar and fat, irregular meals with little variety, an anarchic diet during and outside meals, associated with a lack of physical activity (*Shields, 2005*).

The present study reveals that the average energy intake of the population is 2549.86  $\pm$  444.33 kcal. The average ratios obtained among adolescents, young people, adults and the elderly, however, comply with the standards proposed by Charvet (*Charvet, 2007*). The quantitative distribution of the ratio shows that the macronutrient intake specifically of carbohydrates, proteins and lipids of the typical groups of the population does not comply with the recommendations. For the energy ration, the carbohydrate intake is between 61.68 and 67.50%, while the lipid intake is between 14.74 and 20.70%. These results are far from a balanced distribution proposed by Martin for whom carbohydrate intake should be 50% to 55%, 30% to 35% for lipids and 10 to 15% for proteins (*Potier de Courcy et al., 2003*).

Concerning the nutritional pathological profile, it was found that 41.65% of the population of our study presented a pathology and had a medical history; the pathologies affected adults and the elderly. This prevalence can be explained by several factors related to lifestyle, dietary habits and physiological changes associated with aging (Bauduceau et al., 2017). Indeed, food choices and nutritional habits established over time can have an impact on long-term health. Adults and older people have generally had more time to develop eating habits, and some of these habits can contribute to contracting these different pathologies (Regimbal, 2020). Additionally, sedentary habits associated with less active lifestyles may contribute to nutritional problems (Biscontin, 2018). Also, nutritional needs change with age. Older adults may have different nutritional needs due to physiological changes, muscle loss, decreased appetite, etc. (Aubert, 2018). Hence the difficulty for them to maintain a balanced diet. Finally, adults and older adults may be more likely to develop nutrition-related chronic health problems due to factors such as pre-existing illnesses, metabolic problems or specific age-related medical conditions (Mabiama, 2021). In this study, obesity has a higher prevalence than the other pathologies identified. It induces many health risks such as diabetes, hypertension, arthritis and cardiovascular diseases (Latham, 2001). The combination of infectious pathologies and chronic non-communicable diseases, on the one hand, and problems of malnutrition due to deficiency and obesity, on the other hand, poses a real problem for the healthcare services of these countries (OMS, 2023), we know that excessive consumption of calories, fat, cholesterol, alcohol



and salt, as well as insufficient consumption of fruits, vegetables and fiber, coupled with a sedentary lifestyle largely contribute to the increase in incidence chronic diseases of wealthy populations (*Wharton et al., 2020*).

## Conclusion

The present study aimed to analyze the dietary habits of the Ivorian population from the perspective of domestic consumption and consumption outside the home and establish trends in the most frequent pathological profiles in the Ivorian population. It appears that the population studied is young with an average of  $28.11 \pm 2.64$  years. The population studied weights  $54.59 \pm 9.17$  Kg and an age of  $28.11 \pm 2.64$  years; The average population size is  $1.48 \pm 0.45$  m and the average BMI is  $22.71 \pm 5.56$  (Kg/m<sup>2</sup>). 6.06% are thin; 45.86% a normal build; 19.29% overweight; 21.12% obesity. Several household lifestyle habits expose them to overweight, obesity and other risks of nutritional factors. 81.75% of households have a balanced weekly consumption of different food groups. The average food ration of the population is  $2549.86 \pm 444.33$  kcal. 50.70% of the population were declared to have a pathology and a medical history. This study showed that certain eating habits can be potential factors for overweight and obesity. Anthropometric parameters were influenced by dietary habits, physical activity.

Thus, uncontrolled eating during and outside of meals, associated with a lack of physical activity can be a risk factor for weight gain. To prevent excess weight in the population, we must make them aware of a balanced diet, appropriate regular physical activity and respect for quality sleep.

# **Conflict of interests**

The authors declare no conflict of interest.

### **References:**

- Aubert, L. (2018). Besoins nutritionnels des personnes âgées. Soins Gérontologie, 23(133), 18-21. (In Fr.). https://doi.org/10.1016/j.sger.2018.06.004
- Bauduceau, B. et al. (2017). La nutrition des personnes âgées. Médecine des Maladies Métaboliques, 11(3), 223-227. (In Fr.). https://doi.org/10.1016/S1957-2557(17)30061-5
- Biscontin, A. (2018). Habitudes alimentaires: évolution, caractéristiques, impact sur la santé et génétique nutritionnelle. Sciences pharmaceutiques. France: Université d'Aix-Marseille Faculté de Pharmacie (dumas-01812567). (In Fr.). https://dumas.ccsd.cnrs.fr/dumas-01812567

Charrondiere, U., Haytowitz, D., & Stadlmayr, B. (2012). Base de données FAO/INFOODS sur la densité, version 2.0. Rome, FAO. (In Fr.). https://www.intake.org/resource/faoinfoods-density-databases-density-database-version-20

- Charvet, J. P. (2007). L'alimentation dans le monde; mieux nourrir la planète. Petite encyclopédie- Larousse. (In Fr.)
- David, E., Hélène, B., & Daouda, D. (2019). Les batailles du consommer local en Afrique de l'ouest. Fondation de France et CFSI. (In Fr.). https://www.alimenterre.org/system/files/2019-01/batailles-consommer-local-pp-bd.pdf
- De Jaeger, J.-M. (2016). Les jeunes sacrifient leur budget alimentation. Consulté le 25 Février 2024. (In Fr.) https://etudiant.lefigaro.fr/les-news/actu/detail/article/les-jeunes-sacrifient-leur-budget-alime ntation -21653/



- Dolislager, M. et al. (2022). Consumption of healthy and unhealthy foods by the African poor: evidence from Nigeria, Tanzania, and Uganda. *Agricultural Economics*, 53(6), 870-894. https://doi.org/10.1111/agec.12738
- Dop, M. C. et al. (2003). Outils d'enquête alimentaire par entretien. IRD Éditions. (In Fr.). https://doi.org/10.4000/books.irdeditions.10574
- Enquête par grappes à indicateurs multiples-Côte d'Ivoire 2016. (2019). Institut National de la Statistique (INS), Fonds des Nations Unies pour l'Enfance (UNICEF). (In Fr.). https://microdata.worldbank.org/index.php/catalog/3423
- Janin, P. (2019). Les défis de l'approvisionnement alimentaire: acteurs, lieux et liens. Revue internationale des études du développement, 237(1), 7-34. (In Fr.). https://doi.org/10.3917/ried.237.0007
- Kouassi, M., Kouao, M., & Koffi, K. (2022). Caractérisation intra-annuelle de la variabilité climatique en Côte d'Ivoire. *Articles variés*, 99(2), 289-306. (In Fr.). https://doi.org/10.4000/bagf.9534
- Latham, M. C. (2001). La nutrition dans les pays en développement: les maladies chroniques à implications nutritionnelles. (In Fr.). https://www.fao.org/3/W0073F/w0073f24.htm
- Mabiama, G. (2021). Evaluation de l'état nutritionnel des personnes âgées au Cameroun et facteurs associés. Médecine humaine et pathologie [Thèse de Doctorat, Université de Limoges; Université de Douala]. (In Fr.). http://www.theses.fr/2021LIMO0052
- McDonald, M., & Ezekowitz, J. A. (2007). Fast food: Loving it to die?. Canadian Journal of Diagnosis, 88-91. http://www.stacommunications.com/journals/diagnosis/2007/3-March%202007/088-Feat-Fast%20Food%20\_Ezekowitz.pdf
- Stratégie Nationale de l'Insertion Professionnelle et de l'Emploi des Jeunes (SNIEJ) 2021-2025. (2021). Ministère de la Promotion de la Jeunesse, de l'Insertion Professionnelle et du Service Civique (MPJIPSC). (In Fr.). https://mutualisation.ccmefpuemoa.org/system/files/cotedivoire\_sniej\_ 2021- 2025.pdf
- ProQuest. (2003). Obesite prevention et prise en charge de l'epidemie mondiale: rapport d'une consultation de l'OMS. (In Fr.). https://www.who.int/nutrition/publications/obesity/WHO NTRS\_894/fr/
- OMS. (2023). Maladies non transmissibles. https://www.who.int/fr/news-room/fact-sheets/detail/noncommunicable-diseases
- Plan National Multisectoriel de Nutrition 2016-2020. (2016). République de Côte d'Ivoire. (In Fr.). https://faolex.fao.org/docs/pdf/ivc164992.pdf
- PNMIN. (2015). Analyse de la situation nutritionnelle en Côte d'Ivoire. (In Fr.). https://pnmin.gouv.ci/fichier/doc/Analyse\_situationnelle\_15\_08\_16.pdf
- Potier de Courcy, G. et al. (2003). Besoins nutritionnels et apports conseillés pour la satisfaction de ces besoins. *EMC Endocrinologie Nutrition, 14*(1), 1-32. (In Fr.). https://doi.org/10.1016/S1155-1941(03)00072-6
- Régimbal, F. (2020). À part entière: alimentation et bien-être chez des personnes âgées à Montréal fréquentant des organismes d'aide alimentaire. *Anthropology of Food*, S15. (In Fr.). https://doi.org/10.4000/aof.11037
- Shields, M. (2005) Obésité mesurée: L'embonpoint chez les enfants et les adolescents au Canada. Ottawa: Statistique Canada. (In Fr.). https://www150.statcan.gc.ca/n1/fr/pub/82-620-m/2005001/pdf/4241445-
- STEPS. (2005). Facteurs de risques des maladies chroniques en Côte d'Ivoire. (In Fr.). https://extranet.who.int/ncdsmicrodata/index.php/catalog/625/download/4490
- Wharton, S. et al. (2020). L'obésité chez l'adulte: ligne directrice de pratique clinique. *CMAJ, 192*(49), 1757-1775. (In Fr.) https://doi.org/10.1503/cmaj.191707-f
- WHO. (2021). Malnutrition. (In Fr.). https://www.who.int/fr



# Appendix

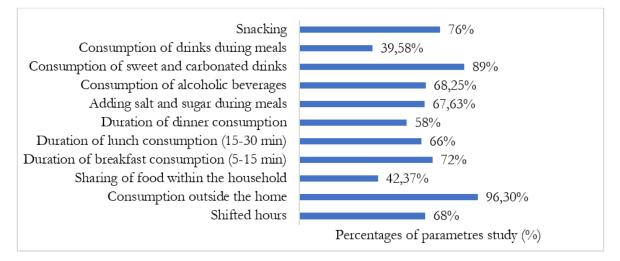


Figure 1. Eating habits and behavior of households in the Abidjan District These eating habits and behaviors are likely to be nutritional risk factors for the Ivorian population.

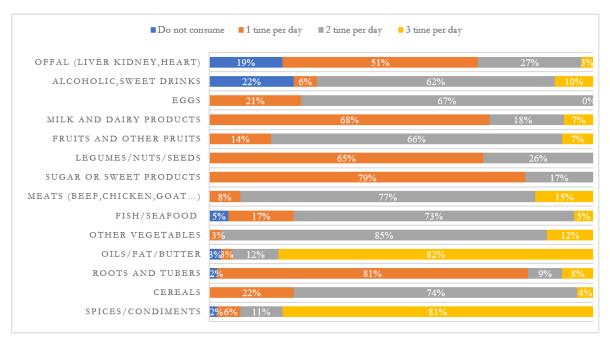


Figure 2. Frequency of daily consumption of different household food groups

This result confirms that most households have a balanced weekly consumption of different food groups (81.75%).



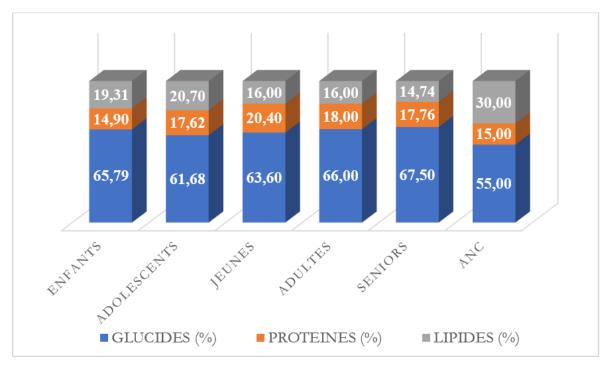


Figure 3. Quantitative representation of the food ration compared to the Recommended Nutritional Intakes (ANC) of typical groups of the Ivorian population

Figure 3 indicates sufficient energy intake for each typical population group while the percentage shares of different types of nutrients are not really balanced.

FeaturesCategoriesHeads of households		Frequency (N=927)	7 Percentage (%)	
Sex	Male	561	60.50	
	Feminine	366	39.50	
Age	19-25	45	4.90	
	26-59	618	66.70	
	60 and over	264	28.40	
Place of residence	Urban	780	84.15	
	Rural	147	15.85	
Marital status	Bride)	550	59.40	
	Divorced/Separated	23	2.47	
	Widower widow	32	3.46	
	Bachelor	322	34.63	
Educational level	Unschooled	307	33.17	
	Traditional teaching	28	2.97	
	Primary	124	13.36	
	Secondary	275	29.69	
	Superior	193	20.79	
Professional status	Frame (high/medium/single)	206	22.27	
	Self-employed	468	50.49	

Table 1. Sociodemographic and economic characteristics of households



	Housewives	4	4.95
	Unemployed/retired	206	22.27
Household water source	Faucet	803	86.63
	Well	23	2.47
	Mineral water	101	10.89

Table 2. Anthropometric characteristics of typical groups of the population of Abidjan

Typical groups	Weight (kg)	Size (m)	Age (years)	BMI (kg/m <sup>2</sup> )
Child (0 to 9 years old)	12.81 ± 4.40	$0.91 \pm 0.03$	$2.84 \pm 1.70$	$15.58 \pm 6.63$
Adolescent (10 to 18 years old)	53.83 ± 8.94	$1.58\pm0.58$	$14.07 \pm 1.16$	$21.56 \pm 3.70$
Young (19 to 25 years old)	$67.27 \pm 6.31$	$1.57\pm0.32$	$21.15 \pm 1.96$	$27.01 \pm 5.12$
Adult (26 to 59 years old)	$76.08 \pm 15.87$	$1.68\pm0.82$	$35.34 \pm 7.37$	$27.08 \pm 8.35$
Elderly (60 and over)	$62.98 \pm 10.34$	$1.66 \pm 0.51$	$67.14 \pm 1.02$	$22.32 \pm 3.99$
TOTAL	$54.59 \pm 9.17$	$1.48\pm0.45$	$28.11 \pm 2.64$	$22.71 \pm 5.56$

Table 3. Distribution of different BMI classes  $\left( kg/m^{2}\right)$  according to sex

Settings		Sex	
BMI class (kg/m <sup>2</sup> )	Total of both sexes (%)	Male (%)	Feminine (%)
Severe acute malnutrition (SAM)	2.72	1.46	1.26
Moderate Acute Malnutrition (MAM)	3.22	1.70	1.52
Thinness (BMI < 18.5)	6.06	2.77	3.29
Normal build (BMI between 18.5 and 24.9	45.86	30.50	15.36
Overweight (BMI between 25 and 29.9)	19.29	8.47	10.82
Moderate obesity (BMI between 30- 34.9)	13.07	4.33	8.74
Severe obesity (BMI between 35-39.9)	6.29	1.72	4.57
Morbid obesity (BMI 40 and above)	3.48	1.46	2.02

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Pathologies	Percentages (%)	Numbers (N=1880	
Diabetes	4.21%	156	
Prostate	2.43%	90	
Arthritis	2.07%	77	
Colopathy	0.81%	30	
Stroke	0.54%	20	
Rheuthoid	0.75%	28	
Heart attack	0.54%	20	
Venous insufficiency	0.47%	17	
Osteoporosis	0.75%	28	
Hypertension	3.29%	122	
Moderate obesity	13.07%	485	
Severe obesity	6.29%	233	
Morbid obesity	3.48%	129	
Undernutrition	6.06%	225	
Acute malnutrition	5.94%	220	
TOTAL	50.70%	1880	

Table 4. Proportions of pathologies identified in the Ivorian population

Table 5. Food ration according to population groups

Typical groups	Food ration (Kcal)
Child (0-9 years)	$2105.81 \pm 401.79$
Teenager (10-17 years old)	$2428.16 \pm 465.99$
Young (18-25 years old)	$2701.98 \pm 584.85$
Adult (26-59 years)	$2940.89 \pm 167.24$
Elderly (60 and over)	$2572.48 \pm 601.78$
Total population	2549.86 ± 444.33
Total population	2549.86 ± 444.33

Table 6. Average daily macronutrient intake according to age groups

Typical groups	Carbohydrates (g/d)	Proteins (g/d)	Lipids (g/d)
Child	$279.020 \pm 122.86$	$63.174 \pm 21.952$	$81.893 \pm 18.54$
Teenager	$297.449 \pm 136.82$	$84.986 \pm 27.134$	$99.824 \pm 20.18$
Young	$358.012 \pm 127.44$	$114,834 \pm 24,605$	$90.066 \pm 19.80$
Adult	$404.373 \pm 137.67$	$110,283 \pm 24,510$	$98.030 \pm 36.10$
Person elderly	$366.579 \pm 126.01$	$96.468 \pm 22.371$	$80.033 \pm 20.71$
Total population	$344.945 \pm 130.78$	93.949 ± 24.330	$80.254 \pm 18.77$



## Successes of Azerbaijan cartoonists in international competitions and exhibitions [5]

Abstract: The analysis and investigation of this topic, the involvement of current artists of the period in the research, the place, importance and connections of Azerbaijani caricature in the world caricature family determine the relevance of this topic. The purpose of the study is to investigate the recognition and promotion of Azerbaijani caricature in the international world, its successes, awards, as well as the variety and variety of caricatures presented in international caricature competitions and exhibitions. Research methods refer to the scientific methodical base. Researches in this field, a large number of developed monographs, scientific and artistic literature, teaching materials are the main research methods of research. In the article, which talks about the place and essence of "wordless" caricatures in the creativity of Azerbaijani artists, which is a new and modern trend, which speaks an international language, and is mainly intended for prepared readers, the steps taken by caricaturists in this direction are brought to attention. The success and achievements of Azerbaijani cartoonists, who benefited from the development prospects of modern caricature, can be evaluated as the success of modern Azerbaijani caricature in general. In the works of artists, who properly represent modern Azerbaijani caricature in the international world, the richness of conventional and laconic means of expression, the approach to metaphor, grotesque, satire and humor in terms of modern requirements is clearly manifested. The intensive development of Azerbaijani caricature in modern times has proven that it has deep artistic traditions in this field, and its ability to make worthy contributions to the development of world caricature art. Modern Azerbaijani caricature, which includes the principles of nationality, statehood, peoplehood, as well as modernity and internationalism, has become an integral part of world visual art. The results and provisions of the research expand the richness of Azerbaijani visual art, the range of variety and genre diversity, which shows the place, weight and influence of modern Azerbaijani caricature in the international caricature space in terms of theoretical and practical significance of the research.

Keywords: caricature, artist, grotesque, movement, satire, humour, graphics.

### Introduction

Since the first years of independence, Azerbaijani artists who have rendered invaluable services to the recognition and development of caricature, which is the most flexible and combative field of fine art, have represented Azerbaijan in international competitions, exhibitions, and prestigious events. The graphic works of Azerbaijani artists, who approach the art they serve and the profession they have chosen with sensitivity and deep love, reflecting the events taking place in the international world, as well as in the socio-political and cultural life of the country, are distinguished by their high artistic level and relevance of the subject, original artist's findings, modern approach draws attention.

Z. Aliyev (2018) notes that during the development of the caricature genre, which is mainly episodic in various periods and in the studies of several authors devoted to satirical graphics, it has acquired rich traditions, occupied an important place in the works of prominent artists and has maintained its relevance. Researching the Azerbaijani satirical graphics, which have gained new forms in the modern era, and analyzing the actual materials suggest that cartoonists-painters have created works covering various topics, carrying sarcasm, irony and irony, distinguished by their sharp satire. K. Mustafayeva (2024) notes that these cartoons were presented on an international scale, selected themes and content ideas were developed in terms of national



interests, and these cartoons gained international importance. From this point of view, it is important to study the development of caricature in the article in terms of directing it in accordance with the modern era.

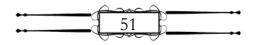
The degree to which the problem is developed. B. Hajizade (2019) noted that "European, Iranian, Turkish and other researchers have very valuable opinions and opinions about the Azerbaijani caricature, which developed in the conditions of interaction with the European press and satirical graphics at the beginning of the 20th century. The researchers noted the breadth and influence of the satire of the Azerbaijani caricature." K. Mustafayeva (2023) notes in her scientific research that cartoons with a new spirit and modern content, speaking in the "international language," which occupies one of the main places in the creativity of Azerbaijani artists, required high professionalism from Azerbaijani cartoonists and special preparation from the audience. In these paintings, which we call "wordless" caricatures, the target of criticism should be sought not in the visual image shown in the plot line, but in the logical conclusion based on it. This, in turn, allows artists to make maximum use of original and local means of expression, achieve the expression of two or more subtextual meanings with one visual image, convey more information to the audience, etc. he set such tasks. A. Guliyev, G. Idrisov, Y. Asadov, B. Hajizadeh, E. Mirzayev, V. Allahyarova, H. Nasiroglu are among the artists who adequately coped with these tasks, pleased the readers with their works with a new spirit and modern content, and created high taste in them. The creativity and activity of S. Nasirov, R. Sharif, K. Abdin, S. Soltanli, etc. are noteworthy. The works of cartoonists who are constantly in search of innovation, echoing with the modern era, with a new spirit, stand out for their high level of artistry as a result of high intelligence and are still relevant today. In these cartoons, the subject is presented in a clear and understandable manner, so no further explanation is needed.

The scientific novelty of the research is determined by the problem itself, and here, for the first time, the international scale of Azerbaijani caricature art is investigated and studied. The purpose of the research is to investigate and determine the international success of the works of modern representatives of caricature art, which has been little studied in Azerbaijani fine art. For this, the following tasks are planned:

- define and interpret the caricature's manifestations, content, form, style and artist's handwriting indicators;
- show the role of artists in the development of caricature art, to determine the arena and international importance of Azerbaijani satirical graphics;
- analyze the works of modern artists active in Azerbaijani satirical graphics, to show the scope of the works of these artists.

# Materials and Methods

National and international artistic values, scientific-theoretical conclusions of art studies were used in the investigation of the problem considered in the research work, and the works corresponding to the formal characteristics of the caricature genre were analyzed. In the study of the problem, the principle of evaluation and chronological sequence was followed, mainly the methods of historical-comparative and art studies analysis were used. Considering that the caricature is a unique field of fine art, the unity between the image and the word was separately monitored. In the study and assessment of individual works, the indicators of "satirical image"



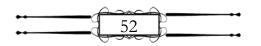
are taken as the basis. The article refers to the researches of Professor Bayram Hajizadeh, Doctor of Philosophy in Art Studies, "European Caricature," "World Caricature" and Ziyadkhan Aliyev, Doctor of Philosophy in Art Studies, "Art of Azerbaijan," "Cartoonists of Azerbaijan – Bayram Hajizade" and other such authors. In the study of the researched topic, such various internet resources and caricature exhibitions as magazine "We and Caricature" (2006, No. 1; 2006, No. 3), catalog of the "Followers of Azimzade" exhibition (2008), catalog of the "Modern Azerbaijani Caricature" exhibition (2006), catalog of the "Molla Nasreddin – 100" cartoon exhibition (2007), catalog of the cartoon exhibition "Molla Nasreddin" and "mollanesreddinchilar" (2006) were also analysed.

## Results

In the first years of independence (1991-2000), Azerbaijani artists participating in international caricature institutions, countries and were awarded special diplomas and prizes in competitions in the USA, China, Cuba, Syria, Israel, Europe, neighboring Turkey, Iran, and participated in these prestigious events. In 1998, Kirman Abdin was awarded the 3<sup>rd</sup> place in the international caricature competition held in Turkey, in 2000 he was awarded the "Ugur" award in the international caricature competition held in Iran, H. Nasiroglu was awarded a special prize in the "Aydın Dogan" international caricature competition in 2000, in 2001, S. Soltanli took first place in the "Fair Play" caricature competition held in Turkey, and was awarded the second place in the international caricature competition "EFRAS-1" held in Egypt. These events, the successes of Azerbaijani artists should be considered as the first steps taken in the direction of the caricature becoming a part of the world caricature family, acquiring international characteristics, equal to nationality (*Narimangizi, 2009*) (*Figure 1*).

In the 2000s, Azerbaijani cartoonists successfully participated in "Humos-Fest" in Italy, "Stuttgart Award" in Germany, "Bueno Salud" in Argentina, as well as in international caricature competitions held in the Czech Republic, Poland, Ukraine, China, Korea, Israel, and Syria their works were included in the catalogs of the best cartoons of the competitions. "It is gratifying that Azerbaijani caricaturists are among the hundred best works selected from thousands of caricatures sent to international competitions. These events indicate that the art of national caricature is constantly developing and strengthening" (We and Caricature, 2006, No. 1). In 1999, including the cartoon authored by Rashid Sharif in the catalog of the best works of the "Aydin Dogan" international cartoon competition held in Turkey, which is considered the "Oscar" of international caricature competitions, is one of the artist's first successes in this field. In this caricature, the author has depicted a person reading a newspaper with a mask on his face. In this work, the cartoonist-artist who opposes the "yellow" or "boulevard" press puts forward the idea of a reader who does not want to swallow the unclean smell of lies, slander and slander published in the press. In this work, distinguished by its well-designed compositional structure, R. Sharif expressed his position against negative situations such as illiteracy and the low level of printed materials in the field of press (Figure 2).

The well-known cartoonist-artist B. Hajizade won the gold medal at the "Leng-Mu" international caricature competition in China in 2005, the special prize at the 11<sup>th</sup> international caricature competition held in Israel, the 1st place in Cuba in 2007, the "Davenport" international competition in the USA in 2009, the 1st place in the caricature competition, the

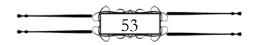


gold medal in Syria in 2015, the cartoon authored by E. Mirzayev won the special prize of UNESCO in the international caricature competition held in Israel in 2005, the silver medal of S. Jafarli in Cuba in 2008, in Brazil in 2009, the first place and bronze medal in Korea in 2011 and S. Soltanli's second place in Spain and bronze medal in Turkey in 2017 can be explained as an indicator of acceptance of Azerbaijani caricature art in the international caricature world (*Aliyev, 2011; Prizes, 2007*) (*Figure 3*).

In 2009, one of the most prestigious competitions in the world, "Davenport" international caricature competition held in the USA, according to the plot line of B. Hajizade's caricature, which was awarded a gold medal, a person who came from the injustices of life, people's hypocrisy, maybe poverty or betrayal decided to commit suicide. In this caricature, instead of a chair or any other object, the artist has depicted his faithful friend – his dog – at the feet of a man who is ready to hang himself with a rope around his throat. It is clear from the painting that the only thing that connects this world-weary person to life in every sense of the word is his dog. At the last moment of his life, in his last breath, perhaps with the aim of ending certain hesitations, the person who decides to check on his nephew friend throws the bone in his hand to the dog. The hero, who hoped that the dog, a symbol of loyalty and trust, the only villain who tied him to life, would not abandon his owner and run away with a bone, was wrong again... Seeing a piece of bone, the dog immediately left his owner and ran after the food, and of course, the rope was pulled, and the hero of the work dies. Perhaps, the artist added a bitter laugh to the theme of betrayal, which is often found in life, in modern times, and presented this scene to the audience in a very different situation, in an unexpected form (Aliyev, 2018; Maharramli, 2009) (Figure 4).

In one of his interviews, Bayram Hajizade, Chairman of the Union of Cartoonists of Azerbaijan, says about this: "In recent years, members of the Union of Cartoonists of Azerbaijan have been successful in international caricature competitions and represent our country well in these prestigious events. Their works are awarded with gold, silver, bronze medals, special prizes and diplomas. The works of our artists are included in the catalogs of selected best cartoons, which is actually a very high indicator. If an Azerbaijani cartoonist takes the first and second places in a prestigious international caricature competition organised in the USA, an Azerbaijani caricaturist wins the first place in a caricature festival held in Cuba and a special prize of the competition, if our artists are awarded silver and bronze places in an international caricature competition held in China, attended by thousands of artists from 80 countries, of course, this is our success. This is the success of modern Azerbaijani cartoonists!" (*Mustafayeva, 2023*; *Azercartoon, 2007*).

Active participation of artists in international caricature competitions, festivals, biennials is directly related to the activities of the Azerbaijan Caricature Artists Public Union. This is a positive result of the effective activity of this institution, the introduction and promotion of Azerbaijani caricature art in the international world. Since the beginning of the activity of the Union of Cartoonists of Azerbaijan, important events have been organized in the direction of recognition and promotion of the art of caricature in the country and in the international world - round tables, meetings with well-known cartoonists, exhibitions and international exhibitions, competitions have been held. Scientific and artistic publications, books, albums and catalogs dedicated to the study, teaching and promotion of this rare and martial art have been prepared



and printed. The Union of Cartoonists of Azerbaijan has established international relations based on the principles of mutual cooperation with caricature organisations of different countries in a short period of time, and was accepted as a full member of FECO (Federation of International Caricature Organizations). International exhibitions of the works of Azerbaijani artists were organised in many countries of the world under the organisation of the Union of Azerbaijani Cartoonists (*Aliyev, 2011; Hajizade, 2019; Hajizade, 2009*).

The Chairman of AKRB, B. Hajizade, writes about this in the book "Modern Azerbaijani Caricature": "Our goal is to keep alive the national school of caricature, which is an integral part of Azerbaijani fine art, and to introduce and promote the art of Azerbaijani caricature in the international world. At a time when our enemies are writing our material and moral wealth in their name, it is our duty to our people to take care of our caricature art, which has a history of more than a hundred years, to protect it, to develop it and to introduce it to the world" (*Hajizade, 2009*).

On January 23, 2006, Mr. Ilham Aliyev, the President of the Republic of Azerbaijan, signed a decree on holding the 100th anniversary of "Molla Nasreddin" magazine at the state level (We and Caricature, 2006, No. 3). On this occasion, on April 7, 2006, in the central exhibition hall named after S. Bahlulzade, the Union of Azerbaijan Cartoonists dedicated to the 100th anniversary of the satirical magazine "Molla Nasreddin" and the 140th anniversary of the creator and editor-in-chief of the magazine, writer-populist Jalil Mammadguluzadeh and caricature was organised. Speaking at the exhibition organised by the Ministry of Culture of the Republic of Azerbaijan, the Union of Artists of Azerbaijan and the Union of Cartoonists of Azerbaijan, the speakers spoke about the importance of the "Molla Nasreddin" art school, the importance of this genre in society, and wished future creative success to cartoonists. The presentation of the first issue of the magazine "We and Caricature" was also held at the event. On the cover of "We and Caricature" magazine and on the poster of the exhibition of the same name, "Move forward with inspiration!" The poster-like cartoon is dedicated to the presidential elections held in Azerbaijan. In this work prepared by the famous artist Bayram Hajizade on the occasion of this significant event, sane people are depicted who clean the society from foreign elements – bribetakers, brokers, indifferent, procrastinating and irresponsible managers, slanderers, fraudsters and speculators. In the center of the work, you can see young people holding the tricolor national flag of Azerbaijan and slogans with the words "Forward with inspiration." Depicting these young men, who are loyal soldiers of the head of the country, together with their comrades-in-arms behind the excavator, the artist presented them as builders of a healthy society and a strong state. This work, in which the founders of New Azerbaijan and their comrades-in-arms are described as fighters, brave and determined citizens, has preserved its relevance even now. Even today, Azerbaijani caricaturists are fighting against the flaws in the society under the motto "Move forward with inspiration." (This Is Us, 2007) E. Avalov, Y. Asadov, B. Hajizade, V. Allahyarova, E. Mirzayev, H. Nasiroglu, Y. Samadov, B. Gasimov, S. Soltanli, B. Yahyayev participated in the "We and Caricature" exhibition. The works of B. Gasimkhanli, N. Salmanova, K. Abdin, T. Mammadov and others have attracted great interest of the audience due to the breadth of the topic, depth of content, approach to the problem, satirical and humorous interpretation of the images, and the creative way of looking at the facts. At the exhibition, the cartoonist Hafiz Nasiroglu's friendship quotes also attracted attention.



The artist, who has successfully worked in the field of photography for many years, while creating his hero, brought to the fore the individual aspects of the person he painted and his unique creative and characteristic features, and tried to highlight them from a certain perspective. Chairman of the Union of Writers – Anar, Chairman of the Union of Artists – Farhad Khalilov, People's Artists – Polad Bulbuloglu, Sayavush Aslan, Yashar Nuri, Ilham Namik Kamal, Javad Zeynalli, Professor Yashar Garayev, composer Khayyam Mirzazade, artists Aghali Ibrahimov, Bayram Hajizade, Arif Huseynov, psychiatrist Agabay Soltanov and others, in addition to the correct expression of the multifaceted and characteristic features of the images, the artist managed to show the subtle laughter-provoking aspects of these images (*Figure 5*).

Within the framework of "Molla Nasreddin" – 100" jubilee events, with the support of the Ministry of Culture of the Republic of Azerbaijan, "Molla Nasreddin and Mollanasreddinchilar" in the building of the National Library of Azerbaijan named after M.F. Akhundov, "Molla Nasreddin – 100" in the exhibition hall of the Union of Azerbaijan Artists named after V. Samadova, Social Republic of Azerbaijan together with the Defense Fund, caricature exhibitions called "Modern Azerbaijan Caricature" were organised in the main building of the fund (*Molla Nasreddin..., 2006; Molla Nasreddin – 100, 2007; Modern Azerbaijani Caricature, 2006*).

In the exhibition "Molla Nasreddin and Mollanesreddinchilar" by Bayram Hajizade under the title "We, 100 years ago and today," "I melted and turned into dust from carrying the pain of the poor nation...," "Why does this nation put a strange hat on its head," "Schools in Karabakh district," the series of cartoons entitled "Our Piers" and "Our Clothes Yesterday and Today" were shown. In these paintings, it is clear that the author is closely familiar with the national mentality of the people and knows its characteristics in depth. In these works, the artist criticizes ignorance, illiteracy, the indifference of the "fathers of the nation" to this state of the people with sharp and revealing satire. B. Hajizade, who illuminates the real truths of the era in his caricatures infused with bitter laughter, highlights the importance of removing these clothes and compares what has been lost and what has been gained in the last hundred years. The artist, who mainly creates plastic figures and forms by means of wide, black contour lines, is known as the author of caricatures distinguished by his artistic aesthetic level and high professionalism.

A series of caricatures by B. Hajizade under the title "New Year's Wishes" were also shown at the exhibition. Among these cartoons are "Let All Grievances Be Reconciled," "Let the Officials Solve All the Problems of the Citizens," "Let the Salaries of Teachers and Doctors Increase So Much That They Don't Even Think about Bribery," "Since There Is No Crime, the Police Officers Should Finally Start Reading," "Let Us Have Gas, Water and Electricity Even in Winter," "Let All Our Citizens Be Employed" and other such paintings, the author actually brought up the dreams with subtle humor. The plastic solution of contours typical of the artist's graphics, the delicate processing of forms, and the achievement of an interesting light-shadow effect by hatching are revealed as a unique aspect of these caricatures, making the presented works attractive (*Molla Nasreddin..., 2006*).

At the exhibition, Vafa Allahyarova presented the cartoons "Sabir's New Goals" and presented them in a new and original interpretation, approaching the famous verses of the famous poet. Among the paintings of V. Allahyarova displayed in this exhibition, the caricatures, whose theme is fed by folklore and classical literary sources, but presented by the artist in a



modern interpretation, attract attention. The processing of the themes "Crow and Fox," "Fitna," "Mashadi Ibad," "Rooster," "Molla Nasreddin" from a new point of view and from an original point of view is particularly interesting in terms of the graphic style individuality of the artist, the resolution of images, and the expressive construction of the composition (*Special issue..., 2005*).

The caricatures of the artists participating in the "Molla Nasreddin - 100" exhibition, organized in the V. Samadova exhibition hall of the Union of Azerbaijan Artists, related to the jubilee theme, "Molla Nasreddin Today" stand out for their subtle humor and interesting interpretation. In these caricatures, the synthesis of oldness and modernity is presented in very subtle shades. E. Avalov's "On the Bus," "In the Hotel" and "Anna Karenina," Y. Asadov's "Ecology," "Mugham Player" and "Thoughts," H. Nasiroglu's "In the Desert," "Press," "Police," E. Mirzayev's "Operation," "Seller" and "Opening of the Exhibition," "Molla in the Hospital" by V. Allahyarova, "The New Boss," "Masks" and "Military Rules" by N. Salmanova, "On the Tribune", "In Prison", K. Abdin's "In Front of the Mirror," "Thief" and "Burial of the hammer," Tofig Mammadov's "Driver," "In Front of the Microphone" and "Toward the Top," B. Gasimov's "Dutiful," "Girl with veil" and "Birth house" caricatures are also great was successfully demonstrated. In the caricature "Press" by the young artist R. Huseynli displayed at the exhibition, the tearing of the white angel mask of the black devil with the help of a pen with "Press" written on it is depicted. The author, who created an interesting composition on the contrast of two contrasting colors, managed to bring his original and expressive work to the attention of the audience using local colours.

It is worth noting that, in general, these exhibitions were a successful step in the direction of visual reflection of artists' achievements. In the drawings of caricaturists displayed in these exhibitions, the development prospects of modern caricature, its adherence to national traditions, the wealth of conventional and laconic means of expression, the approach to metaphor, grotesque, satire, and humor in terms of modern requirements were professionally shown. At this event, "Bayram Hajizade, Yavar Asadov, Bulud Gasimov, Elman Mirzayev, Bayram Gasimkhanli and Vafa Allahyarova were awarded honorary diplomas by the Azerbaijan Union of Caricature Artists for their services in the promotion and development of Azerbaijani caricature art."

Azerbaijan Ministry of Culture on April 7, 2007 at the Azerbaijan State Art Academy "Molla Nasreddin – 100", on April 20 of the same year together with the satirical film-magazine "Mozalan," "This Is Us" at the Museum Center, 2008 – "Followers of Azimzade" in the A. Azimzade house museum in 2009, "Azerbaijani Caricature Yesterday and Today" in the exhibition hall named after S. Bahlulzade, "Oil and Caricature" dedicated to the 15<sup>th</sup> anniversary of the signing of the "Deal of the Century" oil contract in 2009, "Artist and Caricature" dedicated to the 130<sup>th</sup> anniversary of A. Azimzade's birth in 2012, "No to Drugs!" with the support of the State Customs Committee of the Republic of Azerbaijan in 2012 named exhibitions were successfully held (*No to Drugs, 2012; Followers..., 2010; Aliyev, 2011*). Along with experienced artists, teachers and students of the Academy successfully performed at the "Molla Nasreddin – 100" caricature exhibition held in the building of the Azerbaijan State Art Academy. It was not by chance that political, social, household, especially ecology and press topics were widely covered in the exhibition. This trend was primarily related to the relevance



of environmental pollution, freedom of speech and opinion and social problems in around the world. The exhibition includes S. Suleymanova's "Singer" and "Diet," S. Gasimov's "Exhibition" and "Palma," T. Aghayeva's "Turtle and Sheath" an "Treatment," I. Ismayilova's "Artist" and "Pipe Sound," E. Karimov's "Ostrich" and "Themida," G. Ahmadova's "Fire Boiler" and "The Devil," R. Guliyev's "In the Metro" and "Rain," A. Huseynov's "The Situation in the Press" and "A Worker is Required," R. Aliyev's "Death Is Near" and "Help," M. Aslanova's "Traffic" and "New Buildings," F. Ismayilova's "Parrot" and "Fisherman," L. Salamova's "Taxi" and "North," R. Hasanova's "Friendly family" and "The Beggar," E. Gasimov's "Repair Closed" and "Tm Late," N. Huseynov's "Mine Searcher" and "SOS" and other cartoons are chosen for their approach to the problem from an interesting aspect.

People's artist of Azerbaijan, professor Yusif Huseynov writes about the exhibition: "Molla Nasreddin – 100" exhibition held at the Azerbaijan State Art Academy is of great importance for every caricature lover. Students and teachers of academy also participated in this exhibition. Happily, the cartoons shown here are remembered as serious works of art in the truest sense of the word. It should be said that each of these paintings is valuable as a result of the enthusiastic and diligent work of teachers and students. It is no coincidence that B. Hajizade's book "Azerbaijani Caricature Yesterday and Today" was presented to the exhibition participants. The organiser of the exhibition, my former student Bayram Hajizade, is pleased with the goal-oriented activity and achievements in the direction of recognition and promotion of Azerbaijani caricature art. I wish Bayram Hajizade and all the artists who wish to revive this field new works of art with a topical theme and distinguished by their high professionalism (*Soltan Soltanli, 2018*).

These exhibitions, dedicated to the 100<sup>th</sup> anniversary of the publication of "Molla Nasreddin" magazine, the first and only satirical magazine in the entire Muslim East, as well as the anniversaries of well-known personalities, historical and state-important events, naturally, first of all, the national respect for the "Molla Nasreddin" school, caricature traditions, these preserving traditions should be considered as an important step in the direction of promoting this art in modern times. Each organised exhibition is important in the recognition of this genre in society, especially among young people, and as a result, it serves to expand the creative possibilities of artists, the scope of activity, and the full opening of their potential. With the support of the Ministry of Culture of the Republic of Azerbaijan, the Union of Artists of Azerbaijan and the Federation of International Caricature Organizations, and the organisation of the Union of Cartoonists of Azerbaijan, the international caricature competition "Molla Nasreddin - Azerbaijan" is organised every year in Azerbaijan, which creates opportunities for artists to demonstrate their creative abilities. Hundreds of artists and well-known caricaturists from about 60 countries participate in this competition every year it's tirak. "Molla Nasreddin – Azerbaijan" caricature competition, dedicated to important events and significant days in the socio-political and cultural life of the republic, received international status from the first day. "Molla Nasreddin – Azerbaijan" international caricature competition, which has gained great reputation in the world of caricature in a short time, was evaluated by FECO in 2008 with the biggest award - five stars due to the transparency and objectivity of voting, and the high level of organizational issues (We and Caricature, 2006, No. 1; We and Caricature, 2006, No. 3).

It is no coincidence that the "Molla Nasreddin – Azerbaijan" international caricature competition announced in 2013 "No to Separatism and Occupation!" held under the title



Hundreds of artists who participated in this international competition expressed their "No!" to the occupation of lands, the injustice and injustice faced by people raised their voices. To promote and recognize modern Azerbaijani caricature, exhibitions, presentations of new publications, meetings with well-known caricaturists were held in different cities of Israel, Spain, Greece, Serbia, Belarus, Hungary, as well as Ukraine, Turkey, Iran. At these events, cartoons depicting the problems of the world and Azerbaijan, war, terrorism, aggression, the occupation of lands, the injustices faced by people, "End the occupation!", separatism and extremism were shown, and the right voice of people was conveyed to the international community. The words of the president of the International Federation of Cartoonists' Organizations, Mr. Peter Nieuwendijk, who got acquainted with the cartoons of Azerbaijani artists at these exhibitions, are also very valuable when expressing his opinion on the works of Azerbaijani cartoonists: "This is a collection of masterpieces! Caricatures of Azerbaijani artists are drawn in the "international language" style. None of the works need explanation. They themselves speak." (Aliyev, 2018; Hajizade, 2009) The opinion of the famous cartoonist is clear and objective. Indeed, the creativity of caricaturists in the 21st century is marked by the variety of topics, the search for innovation, the use of the achievements of progressive world caricature, the development of classical style features based on national traditions, and the active participation and success of artists in international competitions and exhibitions.

# Conclusions

In the 21<sup>st</sup> century, in the caricatures of Azerbaijani artists displayed in international contests and exhibitions, encounter the trend of renewing the topicality of the topic, the spirit of internationalism, and the approach to the problem.

Azerbaijani artists, who are constantly searching for creative expression, the inexhaustible perspectives of satirical graphics, the options for depicting images and the limit of the grotesque, the artistic aesthetic aspect of caricature and the description of its revealing effect, have worked successfully in the direction of the recognition and promotion of Azerbaijani caricature in the international world, and have been effective in achieving higher achievements have acted.

The successes and achievements of Azerbaijani artists-journalists, who have benefited from the development prospects of modern caricature, can be evaluated as the success of modern Azerbaijani caricature in general. In the creativity of Azerbaijani artists, who properly represent modern Azerbaijani caricature in the international world, the richness of conventional and laconic means of expression, the approach to metaphor, grotesque, satire and humor in terms of modern requirements is clearly manifested.

The intensive development of Azerbaijani caricature in modern times has proven that it has deep artistic traditions in this field, and its ability to make worthy contributions to the development of world caricature art. Modern Azerbaijani caricature, which includes the principles of nationality, statehood, peoplehood, as well as modernity and internationalism, has become an integral part of world visual art.

The success of the works of Azerbaijani artists shown in this scientific research work and their wide range of activities suggests that this topic will be an area that will be addressed and researched by art critics in the future.



## **Conflict of interests**

The author declares no conflict of interest.

## **References:**

- 16 Aydın Doğan Uluslararası Karikatür Yarışması. (2016, July 30). Sanal Müze. (In Turk.). https://sanalmuze.aydindoganvakfi.org.tr/yarismalar/16-aydin-dogan-uluslararasi-karikaturyarismasi-1999-44
- 17 Aydın Doğan Uluslararası Karikatür Yarışması. (2016, July 30). Sanal Müze. (In Turk.) https://sanalmuze.aydindoganvakfi.org.tr/competitions/17-aydin-dogan-international-caricaturecompetition-2000-45
- Aliyev, Z. (2011). Art of Azerbaijan (Vols. 2 and 3). Baku: Letterpress Publishing House.

Aliyev, Z. (2018). Cartoonists of Azerbaijan - Bayram Hajizade. Baku: Azeri-Design Publishing House.

Azercartoon. (2007, May 13). Official Website of Azerbaijan Cartoonists Union. http://www.azercartoon.com Followers of Azimzade. (2008). Catalog of the exhibition. Baku.

Hajizade, B. (2009). World caricature. Baku: East-West Publishing House.

Hajizade, B. (2019). European caricature. Baku: Poligrafaz Publishing House.

Humor Toons. (2018, December 9). Scaferli. https://scaferli.wixsite.com/humortoons/seyran-caferli

Maharramli, G. (2009). Azerbaijani artist's victory in the USA. *Time*, 1-2. Baku: Zaman-Azer Printing House.

Modern Azerbaijani Caricature. (2006). Catalog of the exhibition. Baku.

Molla Nasreddin - 100. (2007). Catalog of the cartoon exhibition. Baku.

Molla Nasreddin and Mollanesreddinchilar. (2006). Catalog of the cartoon exhibition. Baku.

Mustafayeva, K. (2023). "Slowless" caricatures speaking an international language scientific article. *Scientific Collection "Philology and Art Studies"*. Baku: ANAS.

Mustafayeva, K. (2024). Bayram Hajizade's successes in international cartoon competitions and exhibitions. *International Journal of Tourism and Hospitality Studies*. Baku: Azerbaijan University of Tourism and Management.

Narimangizi, N. (2009, July 8). Color interpretation of simplicity. Newspaper "Culture". Baku.

No to Drugs! (2012). Catalog of the International Caricature Competition. State Customs Committee of the Republic of Azerbaijan. https://www.museumcenter.az/en/calendar/457

Prizes. (2007, November 17). Azercartoon. https://www.azercartoon.com/prizes.htm

Special issue of "Hedgehog" satirical magazine. (2005). No. 3. Baku: Azerbaijan Publishing House.

Soltan Soltanli. (2018, February 26). http://soltan-soltanli.com/about.htm

This Is Us. (2007). Cartoon exhibition catalog. Baku.

We and Caricature magazine. (2006). No. 1. Baku: Chashioglu Publishing House.

We and Caricature magazine. (2006). No. 3. Baku: Chashioglu Publishing House.

World Art 2011. (n.d.). *WorldPress*. https://worldart2011.wordpress.com/wpcontent/uploads/2014/02/178966\_370072359719261\_911000124\_n.jpg

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# Appendix

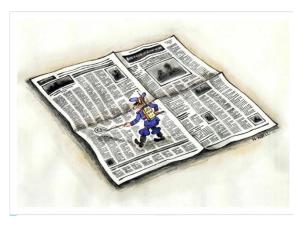


Figure 1. Hafiz Nasiroglu – "Aydin Dogan" international cartoon competition (*17 Aydun...,* 2016)



Figure 2. Rashid Sharif – "Aydin Dogan" international cartoon competition (*16 Aydun..., 2016*)



Figure 3. Bayram Hajizade – "Leng-Mu" international caricature competition – 2005 (*Prizes, 2007*)



Figure 4. Bayram Hajizade – "Davenport" international caricature competition – 2009 (Prizes, 2007)

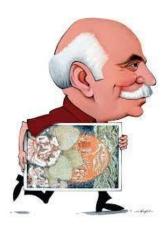


Figure 5. Hafiz Nasiroglu – "Arif Huseynov" (World Art 2011, n.d.)



# Liudmila A. Voloshina<sup>[10]</sup>

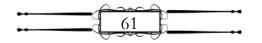
## The existential meaning of traditional Russian art <sup>[6]</sup>

Abstract: The appeal to tradition has recently been particularly noticeable in art, pedagogy, and psychology. All these three areas of human activity are related to our perception of the world. Modern reality is faced with the existential problem of identifying a person, understanding their place and purpose in this world. The relevance of the study is primarily related to this problem. The study object is Russian art in general. The study subject is its existential content. The study aims to show the importance of preserving the Russian tradition in the 20th and 21st centuries art, as an existential task set by the artist. A systematic approach was applied in this study. The basic methods of aesthetic analysis and synthesis are used. Along with philosophical and aesthetic methodology, methods of other sciences are applied: hermeneutical, axiological, existential-phenomenological, semiotic, psychological. The works of folk art researchers were studied in order to write the work: B.A. Rybakov, A.A. Potebni, V.Ya. Propp, E.N. Trubetskoy; books by the existentialist philosopher N.A. Berdyaev; studies on Russian art by V.V. Kandinsky, I.V. Klyun, V.I. Markov, A.N. Benois. The author refers to traditional Russian art in its mythical content in this work. The article examines the connection between the pagan worldview and the subsequent Christian one, and how this was reflected in Russian culture. The peculiarities of Russian existentialism are considered in connection with human religiosity, which is the basis where the mythical worldview of our ancestor and the existentialism of our contemporary converge. What are the similarities between these two ways of thinking, and why is this closeness so noticeable, especially in art? The author concludes that the appeal to tradition in the art of our contemporaries is performed, of course, primarily to solve their own existential issues. However, the most important thing here is that thanks to this conversion, the spiritual bond of generations is not interrupted. And this is already gaining national significance. After all, to morally decompose society and contribute to the collapse of the state, it is enough to destroy the ideology expressed in a particular mythology, which appeals to shared values.

*Keywords:* existentialism, traditional Russian art, symbol, myth, archetype, fairy tale, folklore, paganism, mentality.

## Introduction

The appeal to tradition has recently been particularly noticeable in art, pedagogy, and psychology. All these three areas of human activity are related to our perception of the world. Modern reality is faced with the existential problem of identifying a person and understanding their place and purpose in this world. The relevance of the study is primarily related to this problem. The modern world is very saturated with information that surrounds us everywhere, the flows of which contribute to the disruption of the integrity of perception of the surrounding reality. Feeling this problem at the level of their own existence, artists are increasingly beginning to turn to tradition. This appeal is performed not so much to find original plots but rather in the desire to find some kind of unshakable foundation, to feel native soil. What do they have in common with traditional Russian art, and why does the mythical worldview of our ancient ancestor turn out to be so close precisely at crucial, existentially difficult times? These observations of modern art and reflections on its ways led to the formation of the following goal – to show the importance of preserving the Russian tradition in the art of the 20<sup>th</sup> and 21<sup>st</sup> centuries, as an existential task set by the artist. This personal interest of the artist, which, of course, is related to his individual creative style, is relevant throughout the country. A person must comprehend himself in his native space and have a spiritual relationship with his family.



The study object is Russian art in general.

The study subject is its existential content.

The study aims to show the importance of preserving the Russian tradition in the 20th and

- 21st centuries art, as an existential task that the artist sets for himself.
  - Based on the task set, the following tasks were developed:
- understand how existentialism developed on Russian soil and how this may be related to the human worldview of the pagan world;
- trace the life of the archetype in culture, the connection of the symbol with religious consciousness;
- imagine how the symbol is connected with mentality;
- present the life of tradition in modern art in the context of the artist's search for his own path using the example of a study of the works of Silver Age artists;
- present the life of tradition in contemporary art as an existential task the artist sets for himself.

This study applied a systematic approach. It used the basic methods of aesthetic analysis and synthesis. Along with philosophical and aesthetic methodology, methods of other sciences were applied: hermeneutical, axiological, existential-phenomenological, semiotic, and psychological.

Russian existentialism has developed in its own ways, and these paths are connected with the religious consciousness of the Russian people. One way or another, it leaves its mark on the world's perception, even if the person is an atheist. By denying God, he still acknowledges his existence. However, the main thing is still in the inner knowledge that connects the ego with other personalities, and in the unconscious that connects it with its kind. Russian existentialists N.A. Berdyaev (1993; 1994) and F.M. Dostoevsky (2010) wrote about the independence of Russian existentialism.

The unconscious area in a person is connected not only with the generic but also with a sense of freedom, as an elemental principle in a person. The spontaneous, archetypal is something that cannot be expressed, something that is given to a person as a kind of protection and guidance. But it was precisely these inexpressible feelings of fear of the unknown, fear of death in the first place, that found a visible form in the pagan ritual. B.A. Rybakov (2013) devoted his works to the study of paganism of the ancient Slavs. The understanding of the symbol as a cultural archetype is contained in the works of modern authors: T.A. Sherkova (2019), L.A. Voloshina (2023), V.G. Artemov and Y.V. Filippova (2008).

This feeling of freedom in conveying one's own feelings from the world gripped the artists of the late 19<sup>th</sup> and early 20<sup>th</sup> centuries. The desire for novelty and the search for new forms in art is not the only reason. A new aesthetic could not have been born only as a result of an experiment, even a very competent one. There was a sense of extraordinary uplift, going beyond the limits of his time, associated with a comprehensive interest in traditional art. It could also be a search for foundations, when a person lacks something stable to rely on, when the whole world around him is unstable and unpredictable. Several studies embodying these arguments about the new aesthetics, as a reflection of their worldview, were left by the artists and thinkers



of this period: N.S. Goncharova and M.F. Larionov (2001), I.I. Kandinsky (1918; 2001), I.V. Klyun (1999), V.I. Markov (1912), by A.N. Benois (1998).

The experience of the archetype is filled with the oral folk art of Russia. This is incredibly close to us in a fairy tale that preserves unsolved information about our pagan ancestors. But even in this unsolved content, the fairy tale affects us with its mysterious power, which embodies the idea of our ancient relatives about the world, nature, and that magical side of reality that we almost forgot about in the 21<sup>st</sup> man-made century. A lot has been written about the Russian fairy tale, and the works of famous folklore scientists were used in this work: A.A. Potebnya (2016), V.Y. Propp (2023), E.N. Trubetskoy (1998). Some modern artists reveal this magic with exceptional flair in their works today.

## Results

## Existentialism in Russian Culture as a Problem of Choosing a Path

Existentialism as a worldview is not only a philosophical topic. This is a very important issue of culture in general, which is considered in the context of various reflections. How can a person best express the feelings of himself in being? It is precisely the arts and literature that provide such an opportunity to express the inexpressible. Existentialism as a philosophical trend appeared in Russia relatively recently, in the 19<sup>th</sup> century. Its appearance can be attributed to the fact that people began to increasingly turn to their inner mental and spiritual world in search of answers to eternal questions. This is also due to the weakening of faith, when the Holy Scriptures and church preaching have lost their full-fledged and indisputable character in human minds. The spread of Western enlightenment ideas in Russia and the appearance of the first philosophical teachings contributed to the fact that human thought began to rely more and more on reason and science. All these phenomena of cultural life played an essential role in the life of literature, which gained a new meaning in existentialism. Literature and philosophy have taken the leading positions about religion for the preaching of new knowledge. The main question remained the same - "what is the meaning of human life," but the lines of thought were divided. One path was connected with the search for truth in God, the other was to distance man from God. "The optics of faith and trust, on the one hand, and the optics of disbelief, skepticism, doubt, and suspicion, on the other, either opened up the resources of the Biblical-Christian spiritual experience to a creative person or blocked access to them." (Bachinin, 2012)

It is in this division that the two lines that are connected with the Russian idea originate. This article is about how this was reflected in Russian culture, as it manifested in its spiritual body. Russian literature lovers can see how this separation took place in the Russian consciousness, when a part of the intelligentsia, believing in the ideals of Enlightenment, broke away from God, and, consequently, from the Russian soil, in a speech by F.M. Dostoevsky, delivered on June 8, 1880, at the Society of Lovers of Russian Literature. In Pushkin's works, Dostoevsky saw this clearly defined image of a "Russian Wanderer" in his native land. "These Russian homeless wanderers continue their wanderings to this day and it seems they will not disappear for a long time. And if they do not go to gypsy camps in our time to seek their world ideals from Gypsies in their wild, peculiar way of life and to calm down in the bosom of nature from the confusing and ridiculous life of our Russian-intelligent society, they still fall into



socialism, which did not exist under Aleko, they go with a new faith to another field. and they work on it zealously, believing, like Aleko, that in their fantastic efforts they will achieve their goals and happiness for themselves and the world." (*Dostoevsky, 2010*) And in their search for the truth, they cannot understand that the truth must be sought within themselves. "For behold, the kingdom of God is within you." [Gospel of Luke, Acts 17:20-21]

Pushkin started this gallery of artistic images of unfortunate wanderers who had broken away from their roots: Aleko, Onegin, Pechorin, Rudin, Raskolnikov, Ivan Karamazov. In the literature of the Silver Age, the theme of a wanderer in his native land sounds especially acute in the works of A. Blok, S. Yesenin, M. Tsvetaeva and others. When the feeling of the elements engulfing Russia was unusually strong, people of art and literature felt how lacking this solid ground was under their feet. This ground is connected with such a concept as conciliarity, which at first glance opposes individual consciousness. However, this is only a superficial view. For some artists of the early 20<sup>th</sup> century, this concept was associated with theurgy.

In modern culture, this existential-anthropological type is found in the books of Viktor Pelevin, Venedikt Yerofeyev, Sergey Dovlatov. In the lyrics of modern rock musicians, this man lives, and he has lost the feeling of belonging to his land and his family. There is another story about the unwillingness to belong to this community, but simultaneously, the image of a wanderer remains. The image of the so-called prodigal son is very common in Russian culture. It can be repeated several times, being revived in modern plots. "The story of the prodigal son remains of lasting importance for all times and peoples. In its light, any kind of spiritual wandering, spiritual restlessness and unchastity look like punishment for lack of faith, God-defying behaviour, and God-fighting activities." (*Bachinin, 2012*).

Speaking about the uniqueness of Russian existentialism, first of all, they mean its religious character, fusion with Orthodox consciousness, and appeal to the divine. In Russian existentialism, God always exists. How is it possible to combine tangible reality and the invisible divine world in one's worldview? This is a combination of two contradictory types of consciousness in the thinking of a Russian person: existential and mythological. This is possible with the ability to see through the thickness of existence. The world is a transparency through which the higher reality shines, which is reflected in art. This is due to eschatological thinking. It is a mindset that unites everyone in God's Kingdom while preserving the value of each individual. Such a view of human life in society is associated with the concept of "conciliarity." A person does not feel lonely, feeling spiritual unity with the entire Christian world. This eliminates the contradiction that presents the idea of conciliarity as a danger to individuality at first glance. We see, in fact, the exact coincidence with the unity of people in existence, which is revealed to us in existence. "The unity and value of personality does not exist without a spiritual principle." (Berdyaev, 1993, p. 64) "I" presupposes other personalities and communication between them. The isolation of a personality in itself leads to its demise. A person is connected with society and his family, but simultaneously, he is individual and free.

"The generic is not conciliar. Everything related to gender is also related to the collective unconscious. Christianity will give a person freedom from this dependence. However, the unconscious area in a person turns out to be just as important as the light, conscious one. This is the eternal struggle between Apollonian and Dionysian. Berdyaev correlates this elemental essence in man with meonic freedom. There will always be a human attraction to the cosmic



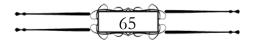
primordial, to the sources of creative energy." (*Berdyaev, 1993, p. 69*) It is the unity of the spontaneous and the rational, male and female in a man split by original sin. "The archaic violent sexual element, male and female, rages in man, it is not defeated by civilisation, but is only driven into the unconscious." (*Berdyaev, 1993, p. 71*) The energy of sex can pass from generative to creative. There is a lot of unconsciousness in a person. Each of us lives not only as a man of modern civilisation, but also as an archaic man.

Existentialism on Russian soil has its own peculiarities, expressed in its bifurcation into two vectors: one is associated with the search for truth in God, the other, on the contrary, with distance from God. Russian thought lies in this division of the main question, which has remained relevant in our time – about the independent path of Russia, which in the history of Russian thought is considered a Russian idea. The theme of wandering in the native land is clearly visible in Russian culture. The wanderer, as a being torn from his native soil, always dissatisfied with neither the surrounding reality nor himself, received an expressive appearance in Russian literature. What is happening here is what can be called distrust of the generic. In the light of Christianity, the connection with the clan received a different meaning, in which the people united in the spiritual space of a single faith. Everything related to gender is related to the collective unconscious. This is how the history of mankind began, and this connection originates in the depths of history.

## Archetypes and the Theme of Experiencing Fear in Traditional Russian Culture

The conscious area in a person belongs to the personality; it helps one relate to others. The life of the unconscious finds its expression in symbols, which are nothing but creations of myth. The unconscious is associated with the dark side of a person, with lower instincts, but at the same time, it is also a source of creative energy. "Creative intent and inspiration, creative intuition always has its primary basis in the unconscious or superconscious." (*Berdyaev, 1993, p. 78*) The superconscious in man is connected with God, with his ability to experience the world eschatologically. Creativity arises from the depths of freedom given to man, from the realm of the unconscious, to find imagery in the real world. At the same time, the unconscious is suppressed by consciousness, because it is impossible to bring the rational into the unconscious.

A person's experience of an unconscious fear is associated with the area of the unconscious. Christianity provides an opportunity to rid human consciousness of fear. However, there is an archetypal fear, its presence in a person is a kind of form of protection. Archetypes are complexes of experiences that fall on us like fate. Their influence is felt in the most intimate part of our lives. Obviously, the Slavs embodied everything they feared and disliked in harmful mythical creatures. Myths were not only a reflection of the worldview of the ancient Slavs but also an attempt to protect yourself and give an explanation for the incomprehensible. Having received a verbal, and even more so a visual appearance, something frightening and inexplicable was already losing its novelty and intimidation, and it did not seem so scary. We can talk about mythical creatures as rather persistent images of consciousness of Slavs and modern man. As for the creatures unfriendly to humans, it turns out they embody everything contrary to human nature. The instinct of fear is embedded in us almost at the genetic level, since the fear of death or sexual taboos existed in prehistoric times and were necessary for human survival. The confrontation of the Russian hero with the evil mythical creature manifests the struggle of



natural viable human instincts with fear, death, and everything that leads to it. This type of creature is quite detailed in fairy tales. The description of the unpleasant details of the creature contained all the unnaturalness of their appearance, which combined the incompatible, representing something repulsive.

The worldview of the ancient Slavs included two opposite poles: forces of evil and forces of good. The third component was the person himself, making sacrifices and producing spells. The source of information about the world of evil is the preserved monuments of ancient Russian literature, in particular, the "Word about Idols." Associated with the fear of death was the fear of people from the world of the dead. The so-called navyas are creatures, which are hostile to man, not just dead, but those who died unbaptised. The most archaic stage corresponds to the sacrifice of vampires and goddesses and nature's evil and good spirits. Zelenin very clearly divided the ancient Russian ideas about the dead into two polar, opposing categories: on the one hand, the deceased generations of their ancestors (grandfathers, dziady) are the patrons and defenders of the living, and on the other, the "dead," the "mortgaged dead," ghouls who harm living people. The concept of "malicious undead" is probably very close to the ancient Russian "navyas," the evil dead flying in the night winds and killing people; a real sacrifice to the harmful dead, about which the author of the "Words about Idols" of the 12<sup>th</sup> century said that in ancient times the Slavs "trebs laid for ghouls…" (*Rybakov, 2013*).

Evil lurked everywhere for our ancient ancestor; the whole of nature was filled with it. The accumulator of evil could be not only the forest as a whole, a particular tree, and even a part of it. Therefore, the plot is quite detailed and provides information on eradicating evil in the tree and its parts. "Evil can threaten from anywhere, the source of malignity can be any object, any person, any "dashing look" from the window, from behind the back, from under the gate or through a crack in the hut. The carriers of evil are the winds of all directions, all the "seventyseven winds," noon and midnight. The power of ghouls is devoid of anthropomorphism. The emanation of evil comes from ghouls, but the evil force itself, carried by the winds, is formless, incorporeal and invisible" (Rybakov B.A., 2013, p. 152). Many traces of these views are preserved in rituals, in folk costume (headdresses: horns, magpie, kichka, kokoshnik), in round dances and games. Incantations reflected archaic animistic ideas about the ubiquity, complete dissolution in nature of dangerous, hostile forces for humans. In folk folklore, these images of evil have developed into a kind of bestiary. Over time, they acquired visual features. We can see images of these creatures on household utensils and jewelry in the form of small sculptural images (Figure 1), but not only in the home environment. It is enough to recall the Dmitrievsky Cathedral in Vladimir, an architectural monument of the 12th century, whose facades are decorated with images of mythical creatures in addition to plant and animal ornaments. Griffins and kitovrases can be seen on the walls (Figure 2). Of course, the decoration here correlates with the biblical story, but the monsters are presented precisely as they can be seen in more ancient monuments of Slavic culture.

Human consciousness is designed so that it always tries to resist chaos as something frightening, spontaneous and unclear. First religious, then cultural. This is how cultural archetypes appear, the symbolic content of artistic images. The inexplicable, frightening spontaneity of chaos was initially opposed by ritual. He was called upon to pacify the elements and restore world order through magical actions and images (*Sherkova, 2019*). For mythological



consciousness, any act of creation requires overcoming some kind of chaos. This chaos in the ideas of ancient man should have taken the visible form of some kind of Chthonic monster. In ancient mythology, the dragon must be defeated as the embodiment of darkness, darkness, and death. He appears in different cultures as a universal archetype associated with the concept of chaos.

The Old Testament mentions the dragon itself in a negative context (Book of Deuteronomy, 32:33; Book of Nehemiah, 2:13; Book of Psalms, 43:20 and 90:13; Book of Jeremiah, 51:34). In the New Testament tradition, there is a complete identification of the dragon with the devil, which is clearly seen in the text of the Apocalypse (Book of Revelation, 12:3,4,7,9,13,16,17; Book of Revelation, 13:2,3,11; Book of Revelation, 16:13; 20:2). The dragon is an ontological evil that must be destroyed so that the time for "a new heaven and a new earth" will come. St. George became the most recognisable victor over the dragon in Christian culture. At the same time, it is important to emphasise that the universal image of the dragon is important not in itself, but as an element of a cosmogonic myth, the purpose of which is to transform chaos into space. For the mythological consciousness, the theme of the destruction of the darkness of the world – hydra, dragon, darkness – is an integral part of the process of cosmogony. The foundations of the universe are born and created from the destroyed chaos dragon. In other words, the described plot of "victory over chaos" can be characterised as follows: the creation of a new thing occurs through overcoming, sacrificing a particular entity, which often (but not necessarily) has hostile properties towards the subject and object of creation (Sherkova, 2019).

The symbol of the World Tree is also associated with the archetype of chaos. The image of the World Tree is an attempt to bring order to chaos, to find a place for each layer of the universe. At the same time, this image represents a unity in which a person and his culture are given a place. It is known about the existence of a guide between the worlds and the mythology associated with this representation. The crown of the World Tree reaches the heavens, and the roots reach the underworld. Deities live in the crown, and demonic and chthonic creatures live at the tree's roots.

Thus, culture initially represented the main harmonising force. The first rituals were aimed at harmonising chaos, the desire to bring stability, reliability, and security to the world around them. To harmonise the chaos in the images of culture, a person created the most important meanings for himself then. Many of them are lost today, and symbols associated with the archetype of chaos still live in art. They no longer possess the power they were initially endowed with, but their effect is undeniable. Otherwise, how can they explain their persistence in culture and the unflagging attention from artists, who often unknowingly fill their works with these images? For example, the vertical system of the world order is found in the paintings of Russian spinning wheels, which are very stable and correspond to specific ideas about a three-level universe. Here we also find a rich symbolism associated with solar signs, signs of earth and water, which have always occupied a stable place in the paintings. Man correlated his worldview with what he saw, and the world stood before him as a tremendous divine dispensation. It was a world both frightening in its unknowability and awe-inspiring. A person of a pagan worldview felt himself in this world, albeit a minor component, but included in this cosmos.



The appearance of the ornament reflected a peculiar form of communication with the world of deities. The appearance of the ornament has its own prerequisites. And they are connected with a person's worldview of a particular time and place. The ornaments were associated with incantatory rituals and reveal to us through their drawings the magical, incantatory essence of objects. Firstly, they give us a reasonably complete list of requests: large and small cattle, sown fields, birds, and, secondly, they repeatedly turn to archaic women of childbirth, whose ideograms, like yeast in dough, are involved in the core of these requests, expressed in lines framing the central mythological scene. It was not enough to embroider horses, sheep horns, birds and sprouts of crops on a towel. It was necessary to give this detailed enumeration a dynamic, as if to communicate, in the imperative mood: "So be it!" The ideographs in labour, often used in ornaments, expressed this incantatory imperative: "Let everything be born!" (Rybakov, 2013) With its orderliness and ritual symbolism, the ornament also resists the chaos of the surrounding natural world, filled with obscure, inexplicable and often dangerous phenomena. This ordering value is related to the law of rhythm. The most straightforward ornamental system, the rhombic ornament, has been known since Paleolithic antiquity. It reflected man's desire to separate himself from the natural world with the help of order, which opposed chaos. An ornament is a visual representation of the biological and natural rhythms in which a person lives. Like music, ornament is a carrier of rhythm, its visual expression through graphics. In the ornament, we can see how the task of organising and reflecting the worldview of a person of a particular era was solved.

Ornament is considered a phenomenon of culture and art and a natural consequence of human observation. Nature is filled with rhythms revealed to our ancestors like a book they constantly read. The first ornamental motifs were undoubtedly seen in nature itself. Their lines and shapes refer us to the images visible to all. The ornament, in its varieties, can be finite (circle) or infinite (meander). However, any of its variations has one property also noticed in ancient times – the effect on the human psyche.

The archetypal in man is connected with the incomprehensible, with the experience of something inexpressible. This is often expressed in a feeling of inexplicable fear, precisely what scares you because it cannot be logically justified. The realm of the unconscious is a whole of mysteries. In traditional art, this chaotic fear is countered by the primary forms of culture, which include the entire system of pagan worship, as a kind of mixture of fetishism and totemism. The system of ancient rituals and rituals contained this attempt to appease and persuade deities not to harm humans. Visually, these magical actions performed by man are expressed in a system of ancient symbols. The ornament represented pictorial forms of harmonisation of unconscious chaos. These were the first human attempts to cope with the frightening reality through culture.

# A Symbol in Traditional Art, Its Connection with Mentality

"A people's mentality is the deep structures of its consciousness, which are basically permanent, stable, uniting different historical epochs. The basic universal values common to all peoples in different cultures have different meanings and accents related to the mentality of these peoples. The mentality of a nation is manifested in its culture, giving it a national identity." (*Artemov & Filippova, 2008*) Speaking of national character, we are talking about a set of "socially, historically and geographically determined psychological traits characteristic of the majority of



representatives of a particular nation and to some extent manifested in the character of each representative of a given nation."

Communality and conciliarity are precisely determined by the mentality of Russian culture, which has its characteristic integrity of worldview, eschatology. In traditional art, this motif sounds like "Unity." The world of pagan Russia was one. This unity included, in addition to the person himself, his entire environment: family, clan, nature, and the gods. The dwelling of our ancient ancestor, with all its architectonics and aesthetics, meant inclusion in the unity of the universe, where man was at least a small particle, but consisting of this fabulous Unity. The feeling of belonging to the One is the natural way of life of a person of that time, where faith, rituals, holidays, and worldview were common. Hence, such important values of the Russian people: family, home – as a receptacle of the family and necessarily representatives of the animal world.

The theme of family, which is especially common in traditional art, reflects a particular archetype. This is precisely how it should be perceived, as an archetype of unity, which has found its expression in a particular symbol (*Figure 3*). Unity is mutual aid and strength against the enemy. The pathos of unity permeates all ancient Russian literature. In traditional art forms, the idea of unity has spread to the theme of numerous battles, where the Russian army is represented as a monolith, something merged into a single dense group. Banners with images of the Savior, the Virgin Mary, and St. George the Victorious always rise above this monolith (*Figure 4*).

The collective consciousness found its expression in a special relationship to nature, from which our forefathers did not separate. The natural world has always been alive, spiritual, and anthropomorphic. He was a part of being human. A single circle of human activity, the life of nature, and a single rhythm of life has found expression in a cycle of recurring holidays filled with deep meaning.

Unity with the natural world was also realised at the household level, when nature was perceived as a wealth that gives a person everything from food and clothing to housing and necessary household items. This love of nature, attention to it, and careful attitude have found expression in folk folklore and traditional art. This unity of nature and man was reflected not only in the subjects but also in the ancient artist's special love for the natural texture, for the material with which he worked.

Collective consciousness, a feature of the Russian mentality, is the soul of traditional art. Without a collective, a school, as keepers of tradition, the existence of this species is impossible. Here, the collective is like parts of a single body, each necessary and individual as part of unity.

With the advent of Christianity, the pagan world receives Light, and the collective consciousness discovers individuality in its depths. Christianity is communal, but there is a place for individual consciousness. A distinctive feature of the Russian mentality is its antinomianism. The duality of the Russian soul is most likely a consequence of this religious dualism. Russian paganism as a worldview has not been completely eliminated, it persists in the attitude of the Russian person to nature, in its spiritualisation, anthropomorphising; in beliefs and omens, Russian fairy tales and other folklore. Christianity appeals to human dignity and informs us about moral law. N.O. Lossky named, in connection with this duality, the main properties of the Russian soul: religiosity – militant atheism, the ability to higher forms of experience –



rebellion; passionate willpower and maximalism – passivity; the search for higher values – nihilism, primordial kindness – unbridled cruelty, talent, tendency to self-irony – lack of self-discipline, lack of sense of proportion (*Artemov & Filippova, 2008*). This dual consciousness makes the Russian people mysterious and incomprehensible. All classical literature and art are permeated with this psychological contradiction.

The mythologised stereotypes of any nationality are significantly influenced by the initial geographical location, forming the so-called cultural landscape. "Geographical images," says D.N. Zamyatin, "are nothing more than a unique language, the language of spatial culture, which, as it were, modifies itself depending on the place, country, region. In the visual arts of the Russian people, some symbols reflect our mentality. These are symbols of space and time associated with geographical features - length, openness, and associated with them: freedom, will, and movement. These are common ones: a road, a bird, a horse. A distinctive feature of the Russian mentality is its unique attitude to time. For Russians, the past is more important than the future. The appeal to history, the memory of historical events, is characteristic of both public and individual consciousness. Perhaps this is because our history contains many vivid emotional events that vividly resonate in the individual consciousness. This attitude to the past is also a reflection of the spirit of Christianity, when the living memory of deceased ancestors is preserved, and those whom we do not even know, who ended their lives in the past centuries. Nostalgia is typical for a Russian person (for his native places and dear childhood and youth memories). This is the merit of our entire culture, which often turns to historical subjects, emotionally enriching them. This feature indicates the presence of a living connection between a modern person and his family, that is, the importance of the collective (us) as a stable archetype. This is the merit of our entire culture, which often turns to historical subjects, emotionally enriching them. This feature indicates the presence of a living connection between a modern person and his family, that is, the importance of the collective (us) as a stable archetype.

All Russian art is humanistic in its respectful attitude towards man, its constant interest in him as an object of image, and the feeling of his presence in those genres where he is not directly depicted. A realistic manner consists of a reliable representation of reality and the fact that reality is precisely the value that inspires the artist. Even in the works of the avant-gardists, this reality, though not always visible, is nevertheless visible and guessed upon careful examination. Thus, in the art of the avant-gardists of the early 20<sup>th</sup> century, their attitude to form and color is connected to traditional art. This attitude to reality also shows how vivid the conciliar feeling is in the artist's individual consciousness. The world around us is understood as a value, as that typical habitat that inspires and excites. Nature in ancient Russian literature is always involved in human life and not only as a habitat. This is an animated world of unknown forces that a person turns to and constantly interacts with. The metaphorical imagery of literary language reflects the ability to spiritualise nature. This anthropomorphism fills any historical work with fabulousness (*Teplitskaya & Voloshina*).

In this regard, art reflects a certain mentality, of how this interpenetration of the individual and the collective occurs. The techniques of artistic thinking are related to the surrounding human being, his worldview. The environment shapes art as a cultural product, created by a person of a particular era. It is created in this way, both from the outside and from the inside,



being a reflection of the psychology of the team. The mentality reflected in art is a spiritual space in which this combination of the individual and the collective, as two streams of creative energy, takes place. It is a living, changing space with which our spiritual and mental life is connected. That is why there is so much talk about mental health and its relationship with the socio-cultural environment. People create culture, and it also affects people. It reflects the psychology of the groups and strata of its time. And in fact, it reports on the state of mental health of society.

On the other hand, art can influence our mental life and preserve and reflect the basic, archetypal that lives in the recesses of our psyche. The archetype, manifesting itself in the symbol, lives in art as a kind of stability, a given. It is difficult to express, its symbolic designation cannot reflect its full depth, it can affect us subconsciously. These symbols are most often found in traditional applied art. They have changed over time, transformed with the advent of Christianity. What is invariably present in them is what is connected with man's relationship with being spiritual. This religious content of the symbol tells us how seriously and reverently our ancient ancestor treated his environment, everything that gave him life and filled it with meaning.

Thus, all the symbols filled with traditional Russian art, which continue to live in the art of our time, were not something borrowed from the outside. Their depth, connected with the collective unconscious, eventually acquired an external form, which reflected everything close and understandable to the Russian people. They reflect those features of the worldview, which are explained by the totality of social, historical, and geographical psychological features characteristic of the majority of representatives of the Russian people.

## The Silver Age and Russian Traditional Culture (in Search of New Meanings)

The end of the 19<sup>th</sup> and the beginning of the 20<sup>th</sup> century was a time of an artist's heightened sense of himself as a unique, free individual. The element of freedom, the sense of impending renewal, was experienced with particular acuteness by people of art. The search for new styles, trends, and techniques was directed outside and towards oneself. It was a period of extraordinary creative intensity. That is when you begin to understand what this "meonic freedom" is, which Nikolai Berdyaev wrote about as something spontaneous, uncontrollable and at the same time very energetically saturated. According to Berdyaev, the question of freedom "is not a question of freedom in a naturalistic-psychological and pedagogical-moralistic formulation. This is a question about the fundamental basis of existence, about the fundamental basis of life." (Berdyaev, 1994, p. 884) This freedom can be called irrational or Dionysian, it precedes good and evil and determines the choice between them. This is freedom, "as the dark source of life, as the primary experience, the abyss that lies deeper than existence itself, and from which existence is determined." (Berdyaev, 1994, p. 92). According to Berdyaev, "there are three principles at work in the world - Providence, i.e., a super-worldly God, freedom, etc., i.e., the human spirit, Fate, i.e., nature, settled, hardened from meonic, dark freedom." (Berdyaev, 1993, p. 28). The interaction of these three principles generates all the world's diversity and human life. The beginning of the 20th century was fanned by this wind of the elements, which permeated the work of poets and artists. It was an undoubted flowering of Russian culture in all the existential diversity of its creators. And during this period, the search for a new aesthetic, a new form, was carried out. Accordingly, the search for new grounds.



"New form" became the slogan of avant-garde art. New feelings conveyed in new art forms are the task of the supporters of this trend. From here, it can be seen that the main focus is on this new, hitherto unknown. New forms that did not exist in painting before, new feelings – feelings more refined than ordinary human ones, they do not even have a name in our language; only the artist himself knows about them with secret knowledge. The artist was faced with the task of growing up and educating himself. "An artist must have something to say to him, because his task is not to master the form, but to adapt this form to the content." (*Kandinsky, 2001*)

In an artist, the inner voice of the important soul will tell you at the right moment what to do and how to do it. He is a priest of the "Beautiful," and he discovers the beautiful only by having a living reference point within himself. What is beautiful is what is beautiful internally. The artist deduces this concentration on his Self from the discrepancy between the artist's inner world and his outer life. "At a time when religion, science, and morality are shaken and when external supports threaten to collapse, a person turns his gaze away from the outside and turns it inward." (*Kandinsky, 2001*)

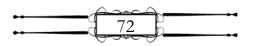
The question of form has always been the main one for the artist. What is meant here is not just some updated forms, but pure forms, an object taken by itself as a first principle. To see the Divine in an object is the goal of the new art, the means to achieve the goal are the same as before – paint and form. The external, the superficial, and things in plain sight, also deserve attention, but this is not the depth. Kandinsky calls it the depth of the swamp. The inner voice of the artist thus becomes the measure of expedient creativity. The artist's eyes "are worth turning towards his inner life, and his ear should incline towards the mouth of inner necessity." (*Kandinsky, 2001*)

Vladimir Markov saw the source of beauty not only in form and material, but most importantly "in the recesses of the human soul itself, in the unconscious movements of the artist's hand and thought." (*Scales, 1905, p. 105*) Such a worldview is similar to that of a child. Markov likens the artist's work to a child's play, and urges him to play selflessly, ignoring the conventions of society, "all established principles, to play with the world of things, and the world of shapes, lines, colors and light." (*Markov, 1912, p. 5*) As a result of such a game, a work should be born.

Artists of the early 20<sup>th</sup> century often refer to the "childhood of the world" – primitive art. The artist's appeal to the ancient world was not only unconscious, indicating that he was endowed with an open and direct perception of the world, like a child. This, moreover, testified to the craving that creative individuality feels for the eternal. For example, turning to primitive art in his work, Mikhail Larionov "tried to highlight the basic, immanently characteristic content of art, which does not change in it with the change of epoch, country, and artistic style." (*Goncharova & Larionov, 2001, p. 17*)

Vasily Kandinsky wrote about the eternal in art as the main and indestructible. What the artist wanted to express as an individual worldview, and what he wanted to say as a child of the epoch, will eventually fade and change in his work. This eternally artistic thing will sound to everyone in the work. Avant-garde art is looking for such a universal style.

In connection with universality in art, Vladimir Markov writes about the three "I" of the artist. The first Self is hidden, subconscious, individual. The second Self is also hidden but already mature, conscious, and transmitted to him atavistically. The third Self is the one



interested in free creativity and represents the manifestation of the first two hidden selves. Here Markov raises the question of the collective unconscious of art and the individual Self of the artist. This is the relationship between the artist's Self and the so-called folk soul. Each artist, being an individual, simultaneously forms a link in a single cultural chain with his work. The meaning of his work is revealed only in comparison with the art of the past. Therefore, even the most modern trends correlate with the previous world experience of art development. We see this in the increased interest of abstractionists in color and light and the Russian icon.

The avant-garde cannot be considered as a self-sufficient phenomenon that grew up on a bare spot. As time has shown, those who understood the need for continuity in art turned out to be correct. Our contemporary A.V. Rapoport writes that "the attempt of the European avant-gardists of the 20<sup>th</sup> century to revive the plurality of perspective viewpoints did not lead to the revival of art but rather to anarchy, since it did not have the idea of God behind it." (*Rapoport, 2003, p. 98*) In the vanguard, it is not the new in itself that is important, but development. An artist cannot exist without traditions. The ideas of the Russian avant-garde at the beginning of the 20th century turned out to be, for some reasons, not fully realised. Clearly, they outlined, thanks to the research of Kazimir Malevich, Vasily Kandinsky, Kuzma Petrov-Vodkin, and others. artists. Modern avant-gardists must understand the need to preserve these connections within art. The study of the pictorial culture of the early 20<sup>th</sup> century, visual media, allows the artist to express himself more fully. This creates an additional element in art.

In search of a new visual language, the artist of the early 20<sup>th</sup> century turns to the past. Often, this is not such a distant time. The same Vladimir Markov, for example, reflecting on texture, wrote that it is "an infinitely subtle existential quality of the shell of a created form, which allows us to consider this quality both as belonging to the world of spiritual entities and as part of a concrete, material-plastic reality." (*Libra, 1905, p. 143*) Vladimir Markov associates this idea of texture as a part of an art form where "two worlds" converge – the real and the unreal – with the Russian icon.

The most obvious connection with the folk soul, understood precisely as the Russian soul, is felt in the work of landscape painters of the late 19<sup>th</sup> and early 20<sup>th</sup> centuries. Alexander Benoit wrote about Levitan that he was a Russian artist "but Levitan is not Russian because he painted Russian motifs out of any patriotic principles, but because he understood the secret charm of Russian nature, its secret meaning, he understood only this, but in a way like no one else." (*Benoit, 1998, p. 350*) The integrity of his painting was achieved by the ability to express the commonality in which all the small things drown. However, this commonality was so genuine and fully characterised all the components that every detail was superfluous. His realism is far from being copied from nature, he sought it out within himself, as if wanting to find a correspondence between the visible and the felt. These searches sometimes lasted for years. It is known that Isaac Levitan rewrote some of his paintings up to five times if it seemed to him that his "poetic or pictorial thought was not sufficiently purified." (*Benoit, 1998, p. 354*)

This implies a special kind of realism, which combines artistic individuality with the Creator himself in moments of creativity. Mikhail Nesterov can also be called a realist poet. He is an artist who "not only discovers in reality the eternal beginnings of beauty and poetry, but with his whole nature breaks away from this reality, he is completely devoted to deep questions of a supernatural and supernatural order." (*Benoit, 1998, p. 367*) Mikhail Nesterov wrote about the



truth of art, saying that he likes only the truth that embodies the inner meaning of man, nature, or animals. A true artist is an individual; consequently, the artistic truth is individual. Nesterov writes that he has nothing to do with any Western movements, but sings "his own songs," which are composed in his soul of the peculiarities of his personal life (*Benoit, 1998, p. 264*). The individuality that the artist is writing about here is precisely the one that does not think of itself in isolation from conciliarity.

Russian nature's gut feeling is entirely at odds with what is called the "Russian style." Alexander Benois believed this was a complete misunderstanding of the tasks of authentic art, in its own way – academicism. Such imitation was akin to barbarism due to a complete misunderstanding of his people, a rupture in the bond between the artist and the people. Only by preserving this connection within oneself can one find the language of art and make it truly a national treasure. Western and purely Russian are intricately intertwined in the modern artist. Alexander Benois explained the way out of the current difficult situation in maintaining independence, namely, freedom of expression. Russian must come from the depths of the artist's soul (*Benoit, 1998*).

The depth of the soul is not a biological concept, but if we talk about Russian, which is stored in depth, then this implies a connection with the Christian worldview, where God is above everything. St. Ephraim the Syrian wrote that when God creates a person, he puts the whole Kingdom of Heaven into his depth. A person's task is to strive all his life to discover him in himself. For the artist, this path of self-awareness is associated with hard work and selfovercoming.

Has realism been completely abandoned behind all these searches for new ways? Of course not, because realism can also change and evolve according to a change in a person's view of the world around them. At that moment in the history of Russian art, realism gained a new angle of view, thanks to the subjectivism that was emerging at that time, which realist artists did not attach importance to. Igor Grabar writes that this was a viewpoint that allowed us to see that there is another way of drawing, one that conveys impressions not because all the details of the painting are processed to the smallest detail, but because in places the work is unfinished, unsaid. The artists realised that completeness takes something away from the work, namely, freedom of expression, which can disregard conventions and allow looking at nature more simply and naturally. Claude Manet showed then that there is not only the truth of reality, but also the subjective truth, the only basis of which is the artist's inner world, the truth of his feelings (*Matz & Yavorskaya, 1969, p. 35*).

An illustrative example is Pavel Filonov, whose work some of our contemporaries call classicism of the 20<sup>th</sup> century (because of its special solemnity). All of Filonov's teaching was reduced to introspection, aimed at self-awareness of the hidden, deep. With a brush in his hands, he analysed Existence, revealing its tragic background. In his opinion, a realist could only be called someone who does not look away. The picture reflects the state of a person comprehending the world.

In the life of art, there finally comes a moment when the artist's inner world begins to overshadow the outer world, and he transmits not so much from nature as from himself. We observe this eclipse in full measure among the artists of non-objective art. After Futurism crushed and mixed the world of things in search of expression and movement, the field of art



was cleared of obsolete poses, faces, objects and "other plot rubbish." (*Klyun, 1999, p. 253*) Then art became itself, an end in itself. It recognised its own form and beauty, which follows only from the properties of the elements appropriate to it, in painting these are the properties of color. Art began to be understood as the creative principle of the artist. It has nothing to do with the personal emotional experiences of the artist, which he tried to embody in the painting until recently. The master practically does not devote any space to the elements of reason, meaning, and feeling. There is no longer a "language of art" in which the artist talks about his impressions; instead, there is an independent art of sound, colour, and volume.

If in the work of realist artists, individuality, striving for the highest, still did not completely break ties with the material world. In the work of the avant-gardists, we see an attempt to dissolve into art. This is an attempt to find such pictorial forms that would no longer serve as a means of reflecting the artist's personal feelings and experiences, but would represent this very individuality in a single cycle of the universe, so to speak, individuality in its purest form. It was a search for the first principles, an appeal to his unconscious. The rejection of imagery was an attempt to convey this unconscious, inexpressible through the properties of painting.

During the period under review, it was natural to turn to tradition. The world around them was unstable and undefined, the old art could not reflect the artists' existential experiences, and what was happening was what should happen at such a moment – an appeal to one's own depth. And this depth was understood by many as the source, the beginning of art. Therefore, there was interest not only in traditional Russian art but also in the cultures of other nations. The important thing here is that the way out in a critical situation was found in this way, in an appeal to one's unconscious, in an appeal to the universal. The artists and poets of the Silver Age solved their artistic tasks here; they relied on their experience and developed their style, but at the same time, they wanted to put something solid and stable in time. For those who relied on their own religious experience, a way out was found and a creative path was formed.

The artist of the late  $19^{\text{th}}$  and early  $20^{\text{th}}$  centuries was close to the symbolism of ancient Russian art. Many of them resorted to the subjects of the Holy Scriptures, correlating them with the present day, giving them new outlines and deepening their meanings. This required an excellent knowledge not only of the Scriptures themselves, but also of ancient Russian painting. It was interesting and peculiar that Natalia Goncharova had this appeal. In search of decorativeness and monumentality, she turns to evangelical characters. Her images of the evangelists and the Virgin Mary preserve little of the iconographic tradition. Here we see deliberately coarsened, stylised iconographic images. The evangelists, with their rough faces and big feet planted firmly on the ground, resemble ordinary peasants in their appearance. The artist used this coarseness of primitive art as a logically chosen technique to communicate the monumentality and inner significance of images (*Figure 5*). Similar reworkings of the experience of ancient icon painters are found in the works of Vladimir Tatlin, in which he proceeds from the principle of the internal construction of the image, through the "iconicity" of the face, which Tatlin chose as an expressive means to convey the significance of the human image.

Pavel Filonov, a master of analytical art, also used gospel themes in his works. They are given in relation to modernity and compositionally resemble their iconographic patterns. The artist combined modernity and eternity in his works. His images are characters from an ancient myth. At the same time, Filonov himself creates a new myth, resorting to image analysis, filling



it with an existential feeling. Decomposing the world into its component elements, he creates new images of the world filled with tragedy and symbolism. The mystery of the archetype on his canvases unfolds before our eyes.

The symbolism of ancient Russian art was revealed to artists through images and subjects and through color and light, which were deeply symbolic. Kuzma Petrov-Vodkin is building a new painting system, turning to the ancient Russian iconographic tradition in search of new painting solutions. Serious work with nature, which preceded the creation of a particular painting, included studying traditional Russian painting. The artist focused his attention on the search for an intense colour scheme, on the generalisation of lines, referring to the most ancient iconographic patterns. He was interested in colour and shape – in their complementarity and consistency.

We see in his works this brightness, this aesthetic admiration of colour in its entirety. The bright local colors, the flatness, and the completeness of the composition are all reminiscent of an ancient Russian icon. In his works such as "Mother," "St. Petersburg Madonna," and "Bathing the Red Horse," this influence of the icon is felt directly. To this feeling, we must add a special feeling that these works of the artist share with the icon – a feeling of silence, detachment. This feeling is significantly intensified in the faces of Petrov-Vodkin's characters, whose gaze is turned inward. The artist's individuality, in search of inspiration and a new artistic language, turning to traditional art, seeks to enrich his painting with it, give depth to modern subjects, and fill them with new content.

Nicholas Roerich believed that the Russian icon with its sonorous colors, generalisation of images, and decorative art was very in tune with modern art and aesthetics of the early 20<sup>th</sup> century. The paintings of ancient Russian temples aroused in him this admiration for the aesthetics of colour, light, and ornaments. Roerich was fascinated by the decorative nature of church art in synthesis with monumentality, which was reflected in the frescoes and mosaics he created. Here his deep knowledge of the principles of compositional construction of icons was revealed. However, in search of a synthesis that would meet Roerich's needs as an artist and individual, he resorted to using symbols similar in spirit to medieval ones. Often, in iconographic works, the artist defeated the philosopher, so fascinated were his coloristic tasks. Decorativeness prevailed over canonicity in his works on religious subjects.

Not only was the ancient Russian icon a source of inspiration for many artists of the turn of the 19<sup>th</sup> and 20<sup>th</sup> centuries, but also folk art. It was attractive for its shapes, color, decorativeness and, of course, the freedom not in professional art. This is the freedom of compositional solutions in conveying scales and plans. In this art, it is possible to stop time in its course, showing simultaneously different time scales, such as in a hagiographic icon. This art, which is not constrained by the rules of perspective, proceeds from the concept of the entire universe, which is reflected in miniature on the plane of the painting. This freedom from conventions, decorativism, the mood of fairy tales, fantasies – everything was attractive to artists in search of new non-academic forms in art. They were interested in the primitive as an aesthetic form.

The primitive, metaphor, brutality, fabulousness, mythologism, and grotesqueness, became a source of new aesthetics in the early 20<sup>th</sup> century. The primitive played an important role in the works of Marc Chagall, Mikhail Larionov, Natalia Goncharova, Ilya Mashkov, Pyotr



Konchalovsky. Mikhail Larionov defined primitive culture as a splint in the broadest sense of the word. Art was like an exciting game. The game is a feeling of childhood when it is attractive for its naturalness and freedom of self-expression. This, of course, is also the fabulousness that is so noticeable in the work of Aristarchus Lentulov. For him, the artist's self-determination was connected with the saturation of his works with the national spirit. His interest was Russian architecture, which he interpreted in a new cubo-futurist manner. He was brought closer to Russian traditional art by his individual perception of the world "exclusively through color and light." The expressiveness of the writing corresponds to the very character of the artist. Lentulov's work is a search that reflects various influences, reinterpreted, driven by personal interest, individual worldview. The artist combined elements of Cubism, the colorful riot of Fauvism and expressionism of the early 20<sup>th</sup> century with the polychrome of traditional Russian art.

The completion of Aristarchus Lentulov's creative quest was the works "Moscow" and "Basil the Blessed," presented at the exhibition in 1914. Here the artist focuses on the national pre-Petrine folklore and lubok. Architecture for him represents the image of the universe. A new world is being born, new imaginative associations are being added. The songfulness and fabulousness of folk art are contained in the composition of the work itself. In the painting "Ringing," the composition is built in the form of semicircles of colored waves, similar to sound waves (*Figure 6*). The "Firmament" and the "Towers of the New Jerusalem Monastery" are like a fairy tale that arose from colorful buildings. The artist was inspired by the ancient Russian icons of the 17<sup>th</sup> century and frescoes with their festive finery.

The aestheticism and decorativism of traditional art reflected the aesthetic views of avantgarde artists. Imperfection, roughness of form, locality of colour, flatness of image – they successfully used folk art elements in their works. The artist's creative personality undoubtedly felt this spirit of tradition, its powerful, emotional beauty, and poetics. But was this process of learning traditional art so deep as to understand the true meaning of folk art, the soul of the people contained in these objects of their life and at the same time aesthetic environment? The national artist, creating his uncomplicated work, expressed himself as a particle of Unity. This Unity was the world around them, alive, breathing, full of mysteries and myths. It was the worldview of a man whose worldview was paganism. Every shape, element of ornament, colour was subordinated to a single harmony, everything followed from this mutual connection of man and nature, man and faith. It was not art for art's sake, but an environment that would become art only years and centuries later.

Aesthetic generalisation, the expression of line and color, and the flatness of composition were discovered by artists of the early 20<sup>th</sup> century as new painting tools. These techniques were successfully found and later used for the tasks of the new art. The creative personality undoubtedly felt this spirit of tradition, its powerful emotional elemental beauty, and its poetics, and was inspired by them. In search of perfection, she intuitively found the best, high-quality, something beyond time's control. This best was found in traditional art.

Of course, the artists of the early 20<sup>th</sup> century did not set themselves the task of comprehending the full depth of traditional Russian art. Their research was in the direction of searching for new artistic forms and new aesthetics. The beginning of the 20<sup>th</sup> century was a time of unprecedented emotional uplift. Interest in tradition encompassed all cultural spheres:



theater, painting, graphics, architecture. Entire historical complexes were created to recreate the picture of life in old Russia.

For example, this purely artistic approach is noticeable in its appeal to iconographic heritage. The icon could be interesting for its colour, decorativeness, content, or mood. But these qualities, taken separately, could not fully reflect her true spirit – otherworldliness, asceticism, silence. It was not an interest in the Russian icon itself as a phenomenon. It was important for the artist to put meaning into the icon, correlated with his worldview and individual creative manner. This is understandable; the creative personality of the artist of the early 20<sup>th</sup> century was different from that of the icon painter of the 15<sup>th</sup> century. Therefore, we see, even in the iconographic works of such artists as Mikhail Vrubel, Mikhail Nesterov, Nicholas Roerich, who seriously studied ancient Russian art, a departure from the canon, or rather, a reflection of their inner understanding of the image.

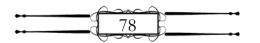
The same can be said about the attitude towards folk art, when the artist admired this antique thing, its aesthetics, but did not perceive it, of course, as an ancient master. This attitude toward traditional art was not a study in the complete sense of the word; it was not a science. The artists of the early 20<sup>th</sup> century did not set goals for themselves that would later be set by the theorists of Russian traditional art. But it was the painters who started these studies, many of whom were seriously engaged in the study of traditional Russian culture, among them were the first collectors (Alexander Bilibin, Alexander Benois, Natalia Goncharova, Mikhail Larionov).

However, it is safe to say that the avant-gardism of the early 20<sup>th</sup> century is not only evidence of a creative upsurge but a search for ways to improve artists' individuality. This is a testament to their skill, inexhaustible hard work, even dedication. Their research on Russian art was profound and meaningful. Otherwise, there would not have been that inspired, fruitful process, which resulted in their numerous works. It was the acquisition of new knowledge that helped him to look at his purpose as an artist. Kandinsky wrote in his book "Steps" about one of his trips to Vologda province: "... It was in these extraordinary huts that I first encountered the miracle that later became one of the elements of my work. Here, I learned not to look at the painting from the outside but to rotate in the painting myself and live in it. Since then, this feeling has lived in me unconsciously, although I experienced it in Moscow churches, especially in the Assumption Cathedral and St. Basil's Cathedral." (*Kandinsky, 1918*)

Thus, the artists of the Russian avant-garde of the early 20th century found a new synthesis in their appeal to traditional art, which corresponded to their inner searches. European Cubism, Impressionism, and modernism, along with their new aesthetics, proved insufficient for the creative individuality of the Russian artist to express itself. They lacked their own, primordial, to revive their canvases, namely – the Russian spirit.

# The Life of Tradition in the Art of Contemporary Artists (in the Context of Existential Experiences)

Traditional art, including ancient monuments and works by modern masters, is a separate world containing countless precious meanings that still nourish our entire Russian culture. And these meanings are especially valuable because they have passed the test of time. They are valuable for the healing content that our contemporaries lack in their existence. These are the



eternal values that each person needs to focus on in their individual lives in order to preserve the life of all mankind. It is traditional folk art that preserves its foundations and preserves this necessary knowledge for us. In general, this knowledge can be attributed to the field of moral life. However, man still creates moral law, caused by social necessity. It can be misunderstood, forgotten, distorted, or rejected if it is not internalised until it becomes the content of your Self. This law must be learned at the genetic level, passed from grandfather to father, from father to son, without interruption. And where can we find such continuity now? Only in the field of human spiritual life. This area of human activity is related to its religious and cultural spheres. Unfortunately, religious faith is not open to everyone as a living feeling. Different people create culture and do not always contain true spirituality, contributing to human growth.

The crafts that preserve the most important foundations, not only of craftsmanship, but also of spirituality, are still alive in traditional art. Preserving tradition only in its visible forms, without understanding the essence of the most important idea, leads to such a phenomenon in art as kitsch. It can be said that Russian traditional culture is based on such "pillars" as love for native nature, a deep connection with it, and commitment to school, since it is school that helps preserve one or another craft. And of course, the religious basis is important in traditional art. Here we are talking not only about the Christian religion, but also about that pagan echo that always lives in the recesses of our unconscious. In traditional art, this is clearly expressed through pagan symbols, attraction to myth, fairy tale, allegory. In this work, the task of describing folk crafts is not set. The emphasis is on showing how this tradition lives in the world of art, including modern art, and its connection with existentialism. After all, art is not only an artist's field of activity, it also implies the recipient's activity. In both cases, this is due to the impact on a person's personality and intention.

Perceiving works of traditional art, a person unconsciously receives in them something that, in general, has very important information for him. This is primarily aesthetic information. Folk art is valuable to us for its purity and integrity, which the individual does not dominate. In this sense, it does not suppress us or force us to reflect intensely, but enters our consciousness in the purity of its form and content, naturally, as in children's perception. This influence is exerted on us not only by the product's shape, which constantly strives for naturalness and expediency in folk art, but also by the color in its bright natural purity. This ornament brings us closer to nature and its rhythms, and the beauty of a symbol that has lived in art for centuries and has been familiar to us since childhood. This is also a natural material, lovingly and competently designed by the artist. And this is what concerns the aesthetics of handicrafts. However, there is also humanistic content, as it is not evil, harmful, or immoral. It contains all the charm of the magical, which is necessary for any person, both child and adult.

Fine art has always reflected the spirit of its time. We can use it to judge our history and the life of our people. However, the work has always reflected the artist's inner life at the same time. And this story, which is not so open to the eye, can sometimes tell more than the first one, which is the representative side of the picture. It contains the actual experiences, worldviews and preferences of a person of a particular era, where one reads what is impossible to read in textbooks through his individual story. This implicit, meanwhile, is of great importance for posterity because it contains something alive, familiar, important, something that all our generations have in common.



There have been many troubled times in the history of Russia when people felt their environment as dangerous, unstable, and incomprehensible. His existence sought the foundations one always wants to rely on in times of danger. We can feel and even see such a search in works of art when we carefully examine them. Painting speaks to us in a unique language: colors and shapes, compositions, artistic images. It contains something close to our soul, because it is sensual. And through the soul, an artistic image can, thanks to symbols, unfold in our spiritual body. These opportunities to influence our spirit through feelings are valuable things we acquire through art. The Gospel myth is not as remote from us as the myths of the ancient Slavs, but it also contains what we can call the collective unconscious. In this case, it would be correct to say that it is not the unconscious but the superconscious. This feeling of the divine presence always lives in a person. It was only in pagan times that this was connected with the natural world, and with the advent of Christianity, with the sense of God as one's own inner content.

The Virgin Mary theme is quite common in 21<sup>st</sup> century art and is interpreted in the context of the artist's modern worldview. The vitality of the Virgin plots fills the modern world of painting with a religious feeling. The appeal to the Virgin in the painting reflects the artist's peculiar perception of Her: as an earthly woman who feels and suffers on an equal basis with us and as the Virgin (in her iconographic interpretation). Nikolai Kolupaev's painting "Luka" does not immediately reveal the plot's connection with the gospel story, as the characters presented here do not look like the Virgin and Child (*Figure 7*). A young peasant woman with rough features and overworked hands holds a chubby, snub-nosed baby in her arms. The mother's gaze is drawn to the icon, which the artist holds in monastic attire – Luke. Someone may not know that the Evangelist Luke painted the first icons of the Virgin. However, even ignorance of this story does not deprive the picture of special solemnity. Everything in it is concise, clear, thoughtful and expressive, like the baby's gaze directed at the viewer.

For example, in the painting "House" by the young artist Natalia Bobrova, we see an appeal to the theme of Christmas (*Figure 8*). This is narrated by the central part of the triptych, which depicts a young mother with a baby in her arms. This theme is immediately read in the familiar color of her clothes and the solemn stillness of the figures surrounding her. The interesting thing about the painting is that Natalia Bobrova has transferred the traditional plot to our days, and the surrounding people depicted on the sides of the triptych are apparently residents of a particular village, possibly familiar to the artist herself. This attempt to understand and feel the atmosphere of the mystery of the gospel story, combining it with the realities of our time, informs about the importance of this ancient, mythological event. Most importantly, it informs us about its significance for the artist himself.

In some works, some symbols also awaken the viewer the feeling of something more profound and more significant than it might seem at first glance. Among such symbols is the cross, which is sometimes presented not explicitly, but as if veiled. Oleg Ildyukov's work "The Soul Is Wide Open" is made in gray gradations (*Figure 9*). The main character here is a scarecrow in a wasteland in a lifeless, windswept space. The wind tears at his old clothes, exposing the skeleton on which they are worn. It is a cross. And despite the rather frivolous name, the work makes a strong impression. And this, of course, is due to the action of the symbol. A cross rising in an open field, on either side of which, at some distance, there are two poles with broken



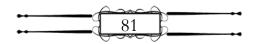
wires, resembles a famous gospel scene. The scarecrow itself always correlates with our understanding of a person, so to speak, it is used for this purpose.

And in Alexey Kupreichenko's work "Glass/Vessel," the cross is the crosspiece of the window (*Figure 10*). Thanks to this symbol, the painting goes beyond the boundaries of an acute social context into the space of the history of all mankind, where a sacrifice was made for each of us on the cross. However, as before, vice takes over the world and boxes of empty bottles gradually block the window. And the window itself, which still shows residential areas, is not as simple as it seems at first glance. From the upper right corner, where the glass is broken, blackness is already creeping into this illusory world, blocked by a lattice (*Voloshina, 2023*).

The symbol's life continues. It can take on new meanings, combine old and new readings. This may be due to the emergence of a new religion, such as what happened to some pagan symbols with the advent of Christianity. They can change in the mind of an individual artist, gaining a new meaning concerning his existentiality. Many famous symbols have been read in a new way by some artists and have taken root in their work precisely in this new interpretation. In modern artists' works, symbols are often important for individual and collective consciousness. These symbols, associated with the feeling of "native" in us: home, family, native nature, have a value coloring.

A house with all the attributes of comfort, a stove, a samovar, a patchwork quilt, children, toys, and pets are often found in modern painting. It is wrong to perceive such topics as some kind of frivolous plots. All these are symbols of that stable, beloved world, which becomes especially desirable and beautiful for us in those moments when something threatens it. In general, the house itself, as a rule, is a village hut, and it often acts in the picture as such a symbol. A unique attitude towards such subjects as images of our memories can explain this love for the depiction of ancient buildings. Here, we can also enjoy the beauty of the texture, such as the cracked wood of old buildings. We admire the beauty of the historical ruins, ancient buildings, the sagging hedge overgrown with willow tea. In the old days, there was a unique charm of passing away as something whole. It has already ended and filled up. It is full of its own history and inner content. It is also full of the archetypal content that the word "home" evokes in each of us. This is a concept that contains a lot more than what can be called. This is the environment that nurtures a person from the cradle. In it, he comprehends life and fills it with himself and his loved ones. In the old days, houses had a long history. More than one generation could have been born and died on the same bed. And grandfathers and great-grandfathers gathered at the standard table. The house is a small existential environment, the closest and most understandable. And this is also the point of such frequent depictions of old houses in painting (*Figure 11*).

The predominance of motives for a peaceful, generally serene life in modern art seems to be a kind of search for some kind of foundations, which you always look for in moments of insecurity, existential discomfort. Numerous references to natural motifs and native symbols attest to this. In the landscape, these are usually favorite places that the artist invites us to admire. But there are special landscapes with a tangible tradition associated with the desire to present the native landscape as an image of a great, boundless, spiritual space. This is due to the peculiarities of perspective construction, for example, in the Russian landscape, a high point of view was often used, which made it possible to cover a large area with a glance. This desire to



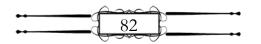
show extent is connected with the task of giving the image not a momentary concrete character, but to endow it with some kind of planetarity. Such a desire of the artist is connected with a sense of the importance of the depicted, even if it is an ordinary plot, as in the painting by the modern artist Alexei Shanin "The Expanse" (*Figure 12*).

Anatoly Rybkin's painting "Snow on the Head. A Russian Man" is one of the works that stop our running and set us up for a unique rhythm (*Figure 13*). In the work, not only the plot sounds symbolically, but also the color. The door is always associated with some kind of passage. It symbolises the connection between two worlds: the one I currently belong to and the one that opens to me outside the door. In Rybkin's painting, a man opens a door into a space of blinding white light. One can only speculate whether the painting represents the change of seasons or whether it is a transition to another level. The man is still on the threshold, he has not stepped out the door, and we see this world in which the signs of everything physical are still visible: the texture of the wooden door itself, covered with moss and rare plants. The guy is still here, but he is already halfway into the space that opens behind the door, like something blindingly white. His head is also covered with this whiteness. The painting gives two readings. For some, it is just the snow of a sudden winter. However, for someone, this is a character's experience of a state of transition, or a premonition of a transition to another world. This reading is connected with a certain symbolism and, in general, with the feeling of something mysterious, unclear, some kind of solemn silence in the painting.

Everything that fills these artistic worlds is nothing more than a solution, first of all, to the most important questions for oneself: about life, death, love, and the meaning of being. All inner anxieties are expressed in visual art, not always at the expense of a dramatic plot or an expressive manner. Most often, this appeal to your deepest feelings does not always occur consciously, intuitively. Accustomed to stereotypes, our mind cannot always answer something that defies any logic. Art allows us to perceive freely and creatively, involving not only our consciousness, but even the subconscious and unconscious areas in us.

Some artists turn to traditional art in order to vent their unconscious. The element of fabulousness is very common in modern art. And this is not only because the artist is predisposed to such a worldview. The mythical consciousness is very much alive in us. This is manifested in art and literature in the form of figurative, metaphorical language, in the form of rich symbolism, which is sometimes not always consciously used. The desire to see a different story behind the real is connected not only with a rich fiction. This is also due to the spontaneous unconscious, which is looking for its way out. And the artist is looking for a form and means of expressing this elemental principle. This is how works often related to pagan themes appear. There are many of them, but not all of them are related to the deep content implied here. These are not the artists who are attracted to the pagan theme as an expressive plot, and not those who turn to the historical theme.

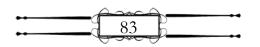
In fact, here we are talking about the feeling of oneself in one's own being. Apparently, the artist needs this appeal to the traditional to understand himself, and, consequently, to find his way in art. This happened with the artists of the early 20<sup>th</sup> century, when individuality conceptualised its existence as a dynamic process related to the search. The search was carried out not so much by external signs as by internal correspondence. A circle of artists deliberately seeks their themes in paganism, as a distant, obscure time, but very attractive inwardly. For



example, the works of the modern painter Oleg Gurenkov can be cited. The artist consciously turns to the theme of paganism. He studies literature and artifacts. Talking about paganism should not be frivolous. If there is an apparent historical error in the painting, or the artist's misunderstanding of the chosen subject, it turns out not to be a deep canvas, but kitsch. Gurenkov does not have this. His impressive paintings in rough-hewn carved frames represent a real world filled with those fears, creatures, and symbols that do not at all seem harmless fairytale characters. Here the artist managed to capture the essence, the feeling of our ancient ancestor, whose world was a whole of mythical content. Everything in the painting: the bright dense color, the symbolism, the abundance of ornaments and some mysterious creatures that are included directly in the environment of people, create this strange feeling of something surreal. The image created by the artist captivates and does not let go. However, at the same time, meanings are born only at the level of children's perception of something magical, a scary fairy tale.

Nevertheless, there is a meaning in the paintings, and at the initial stage it is present at the level of sensations. Only when you look closely do you discover its visual presence. It is about feeling extraordinarily stiff and cramped. Like it happens in a dream, when it seems to you that you are running with all your might, but at the same time something invisible holds you back and does not allow you to move. All the characters in the artist's paintings are actually very constrained. This is not only the result of a tightly constructed composition and the lack of space in the picture, where everything happens in the foreground, but also because they are really held. They are held by countless hands of fabulous creatures, monsters, or just some kind of plants wrapped around their arms and legs (Figure 14). In one of his works, the artist himself explains this feeling. This work is called "Angel." Gurenkov presents two worlds: one crystalthin, shining with unearthly but not vivid colors in the image of a creature next to a boy. This character may have served as the title of the painting (Figure 15). However, this angel is not the messenger of God who brought the good news to people. And in the foreground, under a stole, stands a boy, all in the warm glow from burning Easter candles. It is kind of hidden, closed off from the chilling ghostly creature. He is freed from this fear. In this work, whether intentionally or not, the artist presented us with two faiths at once. And at the same time, the feeling comes from a being sparkling with cosmic radiance and from the warm calm face of a boy who, most likely, is an absolute angel. The unity of the pagan and Christian worldview is not evidence of the split consciousness of the Russian people. This is evidence of how two opposite principles get along in a person: spontaneous and harmonising, or in other words, Dionysian and Apollonian. However, this is also evidence that in the Russian consciousness paganism was able to assimilate into Christianity.

A person is very complicated, he accommodates a multitude, and if you imagine this multitude as a chaotic principle, his desire for integrity and unity becomes clear. A person is always looking for integrity. We see this in the Christian tradition, where the connection with the whole family is preserved. We need a connection with the ancestors for whom the Church offers prayers and a meeting with whom we are promised at the Second Coming. The Canon of Repentance to the Lord says, "for come to judge the living and the dead, and all will stand in their order." And here again the concept of "conciliarity" arises, as a single spiritual space. Of



course, in the pagan worldview, the idea of unity was different, but there was unity; otherwise, our ancestors simply would not have survived alone in a world full of dangers.

Pagan consciousness can be compared to a child's, in that it was naive, phenomenological. The world in it is going to be a given. The "I" in him is realised as an integral part (albeit insignificant). The "I" in the modern world can resist it, question it. The human consciousness has become thinner, but simultaneously the person has distanced himself from the world, sometimes withdrawing into himself. He had lost the awe that was inherent in the pagan ancestor. The time has come when man has distinguished himself from the natural world as an individual. This is the time of Christianity. Christian consciousness will gradually take over a person, but it is impossible to destroy in him what is connected with his childhood. And if we understand paganism as the childhood of the Russian people, then, as in an individual, childhood remains in them forever in the form of memories or dreams, sometimes unclear, but very close. And this is clearly seen in Russian culture, which has preserved for the most part the images and symbols inherent in pagan culture. They have received a new interpretation, but their original, archetypal essence still affects our consciousness, even if not with the same force as before.

Turning to the work of the artist Konstantin Vasiliev, you immediately notice the presence of these two lines in it: pagan and Christian. Pagan lies on the surface. It is given in a unique figurative language: colorful, filled with pagan symbols, archaic text. The characters of his paintings emerge from the depths of the forest, like giants, resembling magi or sorcerers. However, if we consider the artist's work as a whole, you begin to feel a unique mood of serious reflection, double meaning. This is Vasiliev's painting "The Man with the Owl." (Figure 16) In the narrow vertical format of the painting, a majestic and stern old man is placed, towering against the background of a cold sky above the forest expanses stretching beyond the horizon. His figure is interesting, resembling a tree, on top of which sits an owl with outstretched wings. The comparison with a tree comes to mind, perhaps, because from the feet of the elder, a young, thin-stemmed tree grows from where the fire is burning. However, not only does this lead to a similar analogy. In ancient symbolism, man interpreted the world order in the form of a tree. The world tree had three parts corresponding to: the underworld - the Chthonic world, the earthly - the human world, and the heavenly - the abode of the gods. In the figure of the elder, these three parts are visible. But Vasiliev places a burning candle in the place that corresponds to the human environment. This image in his works always acts as a Christian symbol, and the painting begins to acquire an additional meaning, including pagan and Christian content. However, do not forget about the cult of fire among the ancient Slavs, which has survived almost to this day. The artist, creating a visually saturated image, tries to put into it his complicated feelings of himself in being, in which these two worldviews are intertwined for him.

Pagan culture is also fascinating to a modern artist for its mysterious, mythical spirit. The time when a person saw a world full of secrets in the surrounding nature has not entirely passed, and this is seen as a confirmation of the duality of the worldview of modern man. Of course, this is observed mainly in the artistic environment, between people who tend to endow reality with their romantic meanings. This can be seen in the abundant subjects of fine art, which appeal not only to pagan symbols but also directly create new myths. For example, in Frol Ivanov's



work "The Shroud," the beauty of the winter landscape reveals to us the mysterious life of animated trees that captured the human dwelling (*Figure 17*).

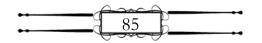
The life of tradition in the works of our contemporaries comes in different versions. However, they are united by the desire to comprehend their worldview, referring to the religious worldview of their ancestors. And this is not only a Christian worldview, but also a pagan one. The artist is interested in letting the myth into the space of his artistic image. He considers the myth as something valuable and necessary for the fullness of self-expression.

## The Theme of the Magical in Modern Art, in Connection with the Existential Predisposition of Man to the Miraculous

Ancient myths, which once expressed the worldview of primitive people, eventually (if there were no poets who immortalised them) turned into fairy tales or laconic prose legends. Folklore is based on the oral word of the people. It is necessary to imagine the spoken word in a person's life in medieval Russia. There was a cult of the word. "Our ancestors equated the word with life itself. The word generated and explained life, for the peasant, a memory keeper and a pledge of the infinity of the future. Along with this (and maybe that is why) it comforted, helped, motivated, interceded, healed, inspired." (*Belov, 1985, p. 227*)

Russian folklore is a multigenre education. This includes, in addition to fairy tales: epics, ritual poetry, riddles, proverbs and sayings, heroic and lyrical songs, etc. Some forms of ancient Russian poetry are things of the past, such as folklore, such as lamentations. And for a medieval man, this rite was obligatory and important. Mourners, like storytellers, were often professional. Lamenting about a dead person was a kind of form of bringing grief to people so that others could share the severity of the loss. It was not so much a physical action as a spiritual one. An oral work is influenced by the general worldview inherent in the environment in which it exists. It is traditional, in that it retains the distinctive features given to it in time and in its native environment. These may be the only varieties of oral folklore in the world that are unique to this area. It is also traditional in its unique way of existence – orally, passed down from generation to generation. This is also a kind of collective work; once started by the ancestors, a work of folklore continues to live on in the mouths of grandchildren and great-grandchildren.

Talking about magic is impossible without referring to a fairy tale. And you need to start here with a fairy tale as an oral expressive form. Oral literary forms appeared before writing, and we need to look for the direct mythical content inherent in the worldview of our distant ancestor. The word precedes all other types of human activity. This stage of oral folk art prepared ancient Russian literature. The word served man in order to objectify thought. It is necessary, first of all, for the speaker himself. Researcher of Russian folklore A.N. Afanasyev writes that the primordial word is the seed from which the myth grows. However, Afanasyev's myth correlated with a poetic form, which nevertheless cannot fully give an idea of a person's true worldview. Myth is not a metaphorical expression. It is a word associated with a direct understanding of being. "The metaphorical nature of expression, understood in a narrow sense, begins simultaneously with a person's ability to recognize and distinguish between the subjective beginning of cognitive thought and its course, which we call (inaccurately) reality, the world, and the object. And we, like ancient man, can call small white clouds sheep, other kinds of clouds cloth, soul and life are steam. However, these are only comparisons for us, and for a



person in the mythical period of consciousness, these are complete truths, as long as he recognises only insignificant differences between the objects being compared..." (*Potebnya, 2016, p. 256*)

For modern consciousness, the ancient myth can be revealed precisely as a metaphor because we now have a completely different knowledge, and do not know the original meaning of many words. "In the oldest dictionary of the Vedas, there were 15 synonyms for a ray of sunlight, 23 for night, 16 for dawn, 30 for clouds, and 100 for water." (*Potebnya, 2016, p. 256*)

A fairy tale and a myth can sometimes completely coincide with each other. "Both myth and ritual are the product of some kind of thinking. It can sometimes be very difficult to explain and define these forms of thinking. However, a folklorist must consider this and understand which ideas underlie some motifs. Primitive thinking knows no abstractions. It manifests itself in actions, forms of social organisation, folklore, and language. Sometimes, a fairy tale motif is inexplicable by any of the above premises. For example, some motifs are based on a different understanding of space, time, and set than what we are used to." (*Propp, 2023*) It is easy to mistake mental reality for everyday reality and vice versa. So, for example, if Baba Yaga threatens to eat the hero, this does not mean that here we certainly have a remnant of cannibalism. The image of the cannibal Yaga could have arisen in another way, as a reflection of some kind of mental (and in this sense also historical), rather than real everyday images (to the fact that everything in fairy tales cannot be taken literally).

Propp describes the structure of the tale to explore its genesis. He considers every phenomenon to which a fairy tale refers as a process. For example, the idea of death in a fairy tale is considered as outlined in its development. The researcher studied many fairy tales to see how the most ancient ideas of people about the world, as a place where reality and imagination combined, are revealed behind the magical plot.

For example, we can identify which basic prohibitions were established in society and what they were related to. The coincidence between the fairy tale and the historical past is so complete that we can claim that the fairy tale here reflects the historical reality of the ban on cutting hair. Hair was considered the location of the soul or magical power. Losing your hair meant losing your strength. Another story about Samson and Delilah confirms this. The character Rapunzel, known to us since childhood, is trapped in a forest tower at puberty's onset. It was into the forest that the girls were taken. The theme of kidnapping girls is usually associated with the snake and marriage. Sometimes a girl gets pregnant from the wind, or unknown forces. However, these forces, the spirits surrounding a person, do not seem to be unknown to the peoples themselves - they know them well and imagine them, and name them quite specifically. And the fear in fairy tales is connected precisely with this abduction of children, who, apparently, were hidden from everyone and there was a strict prohibition to leave the shelter. Related to this is the artistic motivation for the disaster that follows the violation of the ban. "Of all the kinds of prohibitions that they tried to protect themselves from the demons that appear in the fairy tale in the form of snakes, ravens, goats, devils, spirits, whirlwinds, Koshchei, Yaga, and abducting women, girls, and children - of all these types of prohibitions, the prohibition to leave home is best reflected in the fairy tale. Other types of catharsis (fasting, darkness, prohibition of glances and touches, etc.) are less reflected." (Propp, 2023) The oldest religious content of this motif is the fear of invisible forces surrounding a person.



The main character's theme also reveals the peculiarities of a person's worldview in Ancient Russia. The main character of many Russian fairy tales is Ivan the Fool, a character whose way of life, thoughts and actions are incomprehensible to others who live by generally accepted norms. Consequently, he is a "fool" for his environment, for people who prioritise practical common sense and the existing order of the hostel. Folklore researcher Evgeny Trubetskoy sees in this sympathy for the "mad" hero, the exaltation of the fool over the powerful and rich of this world. Wisdom comes to him from outside, often from animals. And this is the endowment of the natural world, including the animal world, with the properties of something that preserves the original wisdom, and not the one associated with social laws, the reverence of our ancestor for nature is palpable. In a fairy tale, it cannot be understood only as a forest, frightening with its mystery and invisible inhabitants. For pagan man, nature was full of both dangerous and kind inhabitants. And in the fairy tale, we see exactly how the natural world, in all its variety of magical powers, helps a person. This also reveals man's connection with the natural world, as a source of vital elements. Hence, this feeling in traditional art, in particular, preserves the idea of the forest as a place where there is a world of its own and which a person also enters, but not as his own home. Hence, the love for natural texture is now perceived as a material for the artist's work. In its long history, every natural material has been endowed with special properties in connection with the mythological consciousness of man.

Russian culture found common points of contact between pagan and Christian principles, and over time they harmoniously combined. E.N. Trubetskoy wrote about this synthesis using the example of a Russian folk tale, arguing that it is in the fairy tale that there is much akin to Christianity. "It is difficult to say what explains this, whether it is the natural predisposition to Christianity of the folk genius who created the fairy tale, or, conversely, the centuries-old influence of Christianity on the national soul, and through it on fairy tales." (Trubetskoy, 1998, p. 198) Russian fairy-tale images perceived the Christian meaning very well. For example, it is easy and natural to turn the main character of a fairy tale, who is in trouble, to God. There is common humility in all religions before the situation, an appeal to higher powers. Ivan the fool has features remind us of a fool – kindness, selflessness. And what is "living water" but a dream of universal resurrection? In the Russian fairy tale, the theme of a "miracle" in the Christian sense of the word can be seen behind the fantastic plot. In Vasilisa the Wise, who combined beauty and power over every creature, one can guess the face of Sophia the Wisdom of God. The fairy tale "contains a rich mystical revelation, its rise from the mundane to the miraculous, its search for the "other kingdom" represents the great value of spiritual life..." (Trubetskoy, 1998, p. 201) The search for an unknown kingdom, which can be observed as a very common plot in a fairy tale, opens up for some researchers to the Christian paradise. The Third Kingdom is never explicitly described. It looks like ours. A king rules this kingdom, people do not always inhabit it. The abductors – an eagle, a falcon, a raven, etc. – take the girls there. His antagonist is here, and the object of his quest is here, and the hero will have to fight. The most striking form of this battle is snake fighting. The snake fighting motif is international, but the Russian fairy tale contains it in a vivid and rather detailed form. The snake will appear here in two guises: specifically as a villain who kidnaps girls, and as the personification of evil in general. The natural and animal world's forces help the hero win again. To reach the thirtieth kingdom, you must walk for a long time, overcome obstacles, and demolish several pairs of shoes. Baba Yaga often



acts as an assistant for the hero on this path. This image and her hut on chicken legs are associated with the transition in the pagan view. It is possible that it was with the transition to another kingdom, the kingdom of the dead. Numerous representatives of the pagan bestiary contain ideas about incomprehensible phenomena in the natural world. They are associated with certain taboos that had to be observed to avoid danger. We can still see them in traditional applied art, which preserves the memory of pagan symbols. His aesthetics are based on this close relationship of the conscious, subconscious and unconscious. The best examples of modern art, which appeal to the Russian fairy tale, preserve this spirit of tradition. In general, a person's predisposition to magic manifests in various aspects of his being. This is also the love of a fairy tale, of everything fantastic. This is the expectation of a miracle, faith in it, and not only in religious life. A person always hopes that help will come unexpectedly and everything will get better in his life. This, of course, is the ability to have a religious worldview, which also, for a non-believer, looks like a mythical one. In creativity, this belief in the miraculous manifests itself most expressively. A person is given an imagination, which he uses to enrich his feelings, figuratively expressing the inexpressible. In creativity, no one forbids showing fiction or fantasy to give your subconscious free rein. His love of metaphor and symbols is reflected in his work.

For the artist of traditional art, a fairy tale has always been a source of plots and, in general, of a unique feeling of something native. The perception of reality as a world of mysteries and mysteries, some magical creatures and phenomena, is close to fairy tales and folk art. Once upon a time, a fairy tale accompanied a folk craftsman and was a part of his life. What we call traditional artworks today were initially created as household items. These were kitchen utensils, furniture, toys for children, tools of peasant labor, etc. Since these items belonged to the most ancient artist and his family, they were made with a certain feeling. Their aesthetics stemmed from the thing's purpose and considering who it was intended for. Spinning wheels were made for the daughter or wife and undoubtedly decorated. It could be a painting, or a carving. The content of the decoration, which contained ancient ornaments filled with symbols, remained unchanged. All this ornamentation was designed to wish for good, wealth, and protection from the evil influences of the surrounding world. Over time, these products become objects that scientists are beginning to be interested in, and the utilitarian principle fades into the background, giving way to aesthetic content. The schools of traditional crafts preserve all this knowledge of ancient symbolism to one degree or another. They preserve and continue to live the folk tradition, expressed not only by observing all the subtleties of craftsmanship but also by conveying the inner content we call the people's soul. Of course, all this is inherent only to those masters for whom this content is open. The process of the birth of a new work of traditional art is performed by combining the collective unconscious, expressed in symbols, and the individual conscious, which is expressed in an artistic form.

All traditional applied art is closely connected with folklore. The most common subject, especially in lacquer miniature paintings, is a Russian fairy tale and epic. In general, the works of any craft, such as Fedoskino, Palekh, and Mstera, are illustrations of a fairy tale, executed in the picturesque manner inherent in this center. However, Palekh is most attracted to the fairy tale. His composition, which came out of the iconographic tradition, is a narrative visually presented in development. We can see both the beginning of the action and its completion simultaneously. Time has no power here, just as it does in a fairy tale. The deep black



background gives additional depth to the plot, as if transporting us to another realm where everything is not like that, everything is magical. The writing style is subtle and ornate, filling the drawing with movement. The presence of fairy-tale characters makes the plot recognisable (*Figure 18*). However, the feeling of magic remains even when the plot is not connected with a fairy tale, for example, in numerous scenes of holidays, or riding a troika. This feeling persists not only because the drawing follows the traditional writing style but also because of the individual feeling of the artist himself. Sincerity and interest in a topic are important in traditional art and other creativity.

Artistic illustration is the closest to a fairy tale among modern art forms. Interest, of course, may be limited by an external imitation of antiquity. It is not enough to know the antique setting and costumes well enough for the plot to convey to the viewer the feeling of something close, dear, especially regarding children's illustrations. How can you convey to a child the feeling that a predatory animal can serve a person or even be an assistant (gray wolf, bear, mouse, etc.)? For example, the artist Evgeny Rachev dressed all his animals in human clothes (*Figure 19*). This anthropomorphism entirely correlates with our Slavic ancestor's idea, endowing the world of plants and animals with human properties. At the same time, it is appropriate in a fairy tale, where all the animals talk and have human qualities. Alternatively, like the artist Gennady Spirin, you can fill the world of fabulous illustration with an extraordinary wealth of textures, color, costume details and everyday life. It is possible that these are unnecessary details for a small child, but who said that only children should read fairy tales? Spirin's drawings combine the skill of an artist and the inquisitive mind of a scientist who enjoys this ethnographic wealth (*Figure 20*).

The most important feeling a person has at any time is the feeling of his home, as the closest cozy world with his native inhabitants. How can you explain to a child in simple words this feeling of home, where people and their small pets live nearby? It is possible to give a feeling of this single space only by uniting everyone with some kind of one feeling. This is a love and mutual help feeling in children's fairy tales. The love between loved ones is often incomplete, for example, in the plot with the stepmother and stepdaughter. However, there are substitutes, these magical animals that help a person and feel sorry for him. In the drawings for the fairy tale "The Silver Hoof" by Olga Ionaitis, this warmth between people and animals is represented in images of a poor but cozy home space, where next to each other: a girl with a cat, a girl with a grandfather. Moreover, the animals here are endowed with very expressive facial expressions.

In any illustration of a Russian fairy tale, the artist understands the importance of depicting a forest as a special place full of secrets and dangers. We remember Ivan Bilibin's or Viktor Vasnetsov's depictions of forests. Modern artists also understand this. Viktor Britvin's illustration of the fairy tale Vasilisa the Beautiful depicts a forest through which three horsemen move: morning, day and night. The artist depicted them in a subtle manner of writing, translucent, freely penetrating through the dense forest. Their simultaneous presence indicates a unique idea of time, which may differ when a person enters another realm.

The image of day and night simultaneously is often found in traditional subjects. This also suggests a connection with the worldview of our ancient ancestor. For him, the present was always connected with the past, and day and night were a single circle that the sun made across the day and night (underground) sky. In modern art, this pagan idea, like many myths, has



undergone assimilation. One can regard the image of two luminaries simultaneously as the duality of Russian consciousness. However, one can look a little deeper at this unity, which explains the presence of spontaneous and rational principles in man. It is possible that the poetry of Fyodor Tyutchev, who lived in the 19<sup>th</sup> century, does not really relate to the topic of this study, but some of his poems just talk about this remarkable unity.

The holy night has risen into the sky, And a pleasant day, a kind day, Like a golden veil, she wrapped, A veil thrown over the abyss. And, like a vision, the outside world is gone...

This simultaneous presence in the painting of day and night can be seen in the works of our contemporary Sergei Rudney. The works of this artist are distinguished at first glance by an appeal to tradition in the form of numerous symbols that he uses in an individual reading, to his own plot. At the same time, their presence is very appropriate. These are, of course, birds, which are permanently endowed with an ancient meaning in traditional art. Rudney's depiction of them is tentative, but their presence is ubiquitous, and it is clear how they participate in the plot unfolding. Angels also fly next to birds. They sit on the roofs, near the monastery gates, and walk in the fields among fabulous flowers. Christian and pagan symbols are intertwined in the paintings, which suggests that the artist does not particularly think about the depth of these symbols, they arise from his subconscious at the time of the origin of the fairy tale. The series of works is called "A Fairy Tale in Colours." And there is really a lot of fairy-tale in them. My favorite character is a cat. Cats appear in the artist's works, as well as in folk tales and jokes. They can fly among the same angels, walk on roofs and monastery courtyards, sail on a ship and even on a fish, ride a horse, and serve as a horse themselves (Figure 21). What is interesting about Rudney's works is how they combine the accurate picture of the world with the fantasy that originates in Russian fairy tales. The artist creates his own world, in which there is a place for images from the surrounding reality (native Pskov), traditional characters from a Russian fairy tale and that individual fantasy, which creates an entirely new plot on this basis. Sergei Rudnev supplements his works with small texts in which the fairy tale continues in verbal form. All these descriptions are filled with a unique admiration for this world, where there is a place for a fairy tale. "There is always a fairy tale in everything. You have to notice it. Walking along the Golden Embankment late in the evening, I noticed the beautiful reflection of the Kremlin in the river... Clouds were floating in the sky... The stars were beginning to appear. And I thought ... and why not make it a fairy tale? ... to look at it differently... And now it is a blooming meadow before the fortress ... and the rooks came ... and the Kremlin has become airy, shining like a precious stone! At the same time, his power remained, but only in the river's memory. Such an unusual evening plein-air happened. Let it warm someone's house!" (Figure 22) Indeed, the works retain an interest in fairy tales, native nature, the world of animals and plants, but all this is already permeated with a mood of love. There is no place for archaic fear here. Mystical content appears in plots related to the theme of the night. The echoes of the pagan world, full of mysteries and unconscious sensations, are more audible here. In Rudnev's paintings, these sensations can be associated with the element of the sensual, and a woman often appears in the image of night as a symbol of this natural element (Figure 23). The magical, fabulous in the works



of modern artists is undoubtedly a consequence of their individual worldviews. This shows a predisposition to the fairy tale not only in its traditional form, but also as a whole, as a special type of thinking. This kind of thinking can be observed in children. This is phenomenological thinking, open to both the real and the miraculous. The ability to see the world in all its layers indicates that a person has developed the ability to build not one picture of the world, but several. This is due not only to age-related changes, but also to the opportunities that art gives a person as a source of new meanings. The world of fairy tales, open to a child from early childhood, gives him this opportunity even before he learns to comprehend cultural riches on his own. Turning to folklore with its fairy tale, which contains the collective unconscious, is the first experience of familiarisation with native culture and roots.

Thus, for an artist of traditional art, a fairy tale has always been a source not only of plots, but in general, of a special mood, very close inwardly. The feeling of reality, a world of mysteries and riddles, some magical creatures and phenomena, is close to fairy tales and folk art. Once upon a time, a fairy tale accompanied a folk craftsman, it was a part of his life. However, even now, her spirit, magical atmosphere, and simplicity are close to the artist, and not only to traditional crafts. The undying love for the Russian fairy tale and faith in its educational properties speak about the love and significance of folklore, such as using proverbs and sayings, riddles, games, songs, and jokes in our lives. We may not notice this, but if we remove ancient Russian folklore from our reality, even in the truncated form in which it has been preserved, our lives will lose that childish, magical, lively and joyful beginning that it preserves (*Teplitskaya & Voloshina, 2022*).

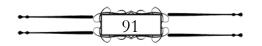
## Discussion

In the future, the author suggests the following directions for continuing study on the topic:

- 1. The problem of attitudes towards tradition in modern Russian culture, where kitsch is gaining a strong position. Innovation and tradition in art.
- 2. The pagan theme is very attractive to the artist, but little is known about it in the sense that here, we interact with a mythical consciousness. It can sometimes be very difficult to explain and define these forms of thinking.
- 3. Turning to tradition as an existential task.

### Conclusion

It would be wrong to consider the theme of existentialism in traditional Russian art only in the past tense. This kind of art is still alive today, and its principal value lies in the fact that it unites the past of the people with their present. We can say that this art is always relevant in its deep content. Existentialism as a worldview developed on Russian soil in two directions, one of which is connected with Orthodoxy, the search for God, and the other with distance from God. Understanding oneself in this world to the Divine idea of man is correlated not only with the Christian religion. Turning to the culture of the Russian people as an expression of a particular worldview, it is not difficult to notice how Christianity and paganism coexist side by side. With the advent of Christianity in Russia, the pagan religion assimilated, first taking on the external side of the new religion, and then the substantive one. There was a restructuring of the



consciousness of the Russian people, which was reflected in the culture. It is culture that allows us to draw such conclusions.

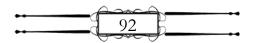
The vitality of paganism in culture is noticeable primarily in art, which preserves all the ancient symbols transferred to Christian soil and gives them additional meanings. However, these meanings were not artificially introduced, their content correlated with the ancient history that they already had. Symbols such as a horse, a bird, and a fish, having received Christian content, remained the same positive symbols; and the serpent, representing the evil of the world, remained the personification of this evil, but already in the Christian story "The Miracle of George about the Serpent." And all this suggests that the symbol in the tradition is associated with something very ancient, profound. This deep thing is nothing more than an archetype. Of course, our distant ancestors' worldview differed from ours; it was not existential in the sense that we attach to this word now. It was a mythical worldview based not so much on logic as on feeling or direct sensation, which was often unconscious and somewhat reminiscent of childhood. It has not yet been based on scientific knowledge and self-reflection. The depth of the symbol is related to the collective unconscious. The symbols reflect those features of the worldview, which are explained by the totality of social, historical, and geographical psychological features characteristic of the majority of representatives of the Russian people. Traditional art contains the axiological content that reflects a person's attitude to nature, his family, and his kind. These features of the worldview are valuable precisely for their enduring value.

Artists of the 20<sup>th</sup> and 21<sup>st</sup> centuries often turn to traditional Russian art in their work. And this is not just a desire to make your painting more colorful and original. This is where the rethinking of one's own worldview takes place in the general space of one's native culture. The period of the Silver Age in the history of Russian art was marked by an unprecedented rise in interest in the traditional. This was due, of course, not only to the search for a new aesthetic, but also to the search for my own Self, which at that moment needed solid support. And this support was found in the Russian icon, splint, folk ornament, and folklore.

The connection with folklore in modern art should be considered not so much as direct contact with well-known fairy-tale plots, but rather as a particular worldview, when another world opens up for the artist behind the visible reality. The "Other Kingdom" is not only found in Russian fairy tales but also reported by the Christian religion. The ability to see the magical behind the mundane is inherent in many contemporary artists. This can be observed in successful illustrations of fairy tales, in the use of allegories and symbols, and the unique feeling of something inexpressible and extraordinary.

Modern art often refers to the traditional heritage, maybe not always explicitly, but quite palpably. The life of tradition in the works of our contemporaries appears in different variations. However, they are united by the desire to comprehend their worldview, referring to the religious worldview of their ancestors. When talking about the most important problems of our time, the artist often turns to myth, pagan or Christian, as if in search of something unshakable. He considers the myth as something valuable and necessary for the fullness of self-expression.

The appeal to tradition in the art of our contemporaries is carried out, of course, primarily to solve their own existential issues for themselves. But the most important thing here is that thanks to this conversion, the spiritual bond of generations is not interrupted. And this is already



gaining national significance. After all, to morally decompose society and contribute to the collapse of the state, it is enough to destroy the ideology expressed in a particular mythology, which appeals to shared values.

### **Conflict of interests**

The author declares no conflict of interest.

#### **References:**

- Artemov, V. G., & Filippova, Ya. V. (2008). The mentality of the Russian people: traditions and evolution. *Bulletin of the Nizhny Novgorod Lobachevsky University*, 2(10), 1-12. (In Russ.)
- Bachinin, V. (2012). The existential space of Russian literature. Free Thought, 9-10, 89-102. (In Russ.)
- Belov, V. I. (1985). Lad. Essays on folk aesthetics. Arkhangelsk, Vologda: North-Western Book. (In Russ.)
- Benois, A. (1998). The history of Russian painting in the 19th century. Moscow: Republic. (In Russ.)
- Berdyaev, N. A. (1993). On the appointment of a person. Moscow: Republic. (In Russ.)
- Berdyaev, N. A. (1994). The philosophy of the free spirit. Moscow: Republic. (In Russ.)
- Dostoevsky, F. M. (2010). Pushkin. In *The Writer's Diary* (pp. 706-723). Moscow: Institute of Russian Civilization. (In Russ.)
- Goncharova, N. S., & Larionov, M. F. (2001). Research and publications. Moscow: Nauka. (In Russ.)
- Kandinsky, V. (1918). Steps. Moscow: Department of Fine Arts of the People's Commissariat. (In Russ.)
- Kandinsky, V. (2001). Selected works on the theory of art (Vol. 1.). Moscow. (In Russ.)
- Klyun, I. V. (1999). My path in art. Moscow: "R A". (In Russ.)
- Markov, V. (1912). Principles of new art. Youth Union, 1-2. (In Russ.)
- Matz, I. L., & Yavorskaya, N. V. (1969). *Masters of the arts about art* (Vol. 5., Part 2). Moscow: Iskusstvo. (In Russ.)
- Potebnya, A. A. (2016). Thought and language. Selected works. Moscow. (In Russ.)
- Propp, V. Ya. (2023). The historical roots of the fairy tale. Moscow: Porthole. (In Russ.)
- Rapoport, A. V. (2003). Nonconformism remains. St. Petersburg, San Francisco: DEAN. (In Russ.)
- Rybakov, B. A. (2013). Paganism of the ancient Slavs. Moscow: Academic Project. (In Russ.)
- Scales. [Vesy]. (1905). No. 1. (In Russ.)
- Sherkova, T. A. (2019). Chaos and Cosmos: an analysis of the panels from Tomb 100 in Hierakonpolis in the context of archaeological and iconographic research. *Egypt and Neighboring Countries*, 3, 82-105. (In Russ.)
- Teplitskaya, A. A., & Voloshina, L. A. (2022). Workbook on ancient Russian literature and folklore: Manual for independent work. Moscow: Direct Media Publishing. (In Russ.)
- Trubetskoy, E. N. (1998). The Christian in the Russian folk tale. Rostov-on-Don. (In Russ.)

Voloshina, L. A. (2023). Modern visual art and the search for oneself in the space of myth. *Petersburg Art History Notebooks*, 75, 29-36. St. Petersburg. (In Russ.)

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# Appendix



Figure 1. Buckles of the  $17^{th}$  and  $$18^{th}$$  centuries



Figure 2. Kitovras. Relief of Dmitrievsky Cathedral. 12<sup>th</sup> century



Figure 3. Tatiana Kamanina. Rest



Figure 4. V. Semenov. The Tale of Igor's Campaign



Figure 5. Natalia Goncharova. The Evangelists



Figure 6. Aristarchus Lentulov. The ringing



Figure 7. Nikolai Kolupaev. Luke



Figure 8. Natalia Bobrova. House



Figure 9. Oleg Ildyukov. The Soul Is Wide Open

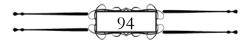




Figure 10. Alexey Kupreichenko. The composition of civilization. Glass/The vessel



Figure 11. Vladimir Brzezovsky



Figure 12. Alexey Shanin. Space



Figure 13. Anatoly Rybkin. Out of the Blue. The Russian Man



Figure 14. Oleg Gurenkov. God Forest



Figure 15. Oleg Gurenkov. Angel



Figure 16. Konstantin Vasiliev. The Man with the Owl



Figure 17. Ivanov Frol. The Shroud



Figure 18. Suvorov. The Tale of Peter and Fevronia

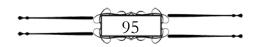






Figure 19. Evgeny Rachev. Masha and the Bear

Figure 20. Gennady Spirin. Sadko



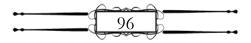
Figure 21. Sergey Rudnev. Escape



Figure 22. Sergey Rudnev. Golden Embankment in Pskov



Figure 23. Sergey Rudnev. Night



## Natalia K. Medvedeva<sup>[11]</sup>

# Features of developing indicators for the economic assessment of the quality of business incubator services [7]

*Abstract:* The University business incubator is not an independent organisation, but is a division of the university. The development of indicators for the economic assessment of the business incubator services quality is a preparatory stage in developing a methodology. Its purpose is to create tools for analysing the quality of services, which will identify the strengths and weaknesses of the existing business incubator, like determine the directions of development. The study subject was the economic assessment of university business incubators. The study object was a university business incubator. The study aimed to develop economic assessment indicators for four types of university technological, non-technological, project training and mixed business incubators. Analytical, logical and mathematical research methods were used to achieve this purpose. The study used scientific works in innovative approaches to developing the university environment, like statistical data and analytical materials. The author developed blocks of indicators for evaluating a university business incubator, considering its type according to the classification of the author of the study: technological, non-technological, project training and mixed. The indicators of the economic assessment of university business incubators serve as the basis for developing a methodology to evaluate the services provided by a university business incubator.

*Keywords:* university business incubator, economic assessment, economic efficiency coefficients, intellectual activity results, small innovative enterprise, project training program.

## Abbreviations:

*CSI* is customer satisfaction index, *IAR* is intellectual activity results, *SIE* is small innovative enterprise, *SPS* is scientific and pedagogical staff.

#### Introduction

The university business incubator is not an independent organisation, but it is a division of the university. The indicators development for the economic assessment of the business incubator services quality is a preparatory stage in developing a methodology. Its purpose is to create tools for analysing the quality of services, which will identify the strengths and weaknesses of the existing business incubator, like determine the directions of development. It is worth noting that the economic assessment of direct indicators is difficult due to the fact that it is not always possible to determine the degree of participation of a business incubator in the performance indicators of the university and SIEs created on its basis. The evaluation of indirect indicators should consider the influence of external and internal factors unrelated to the activities of the business incubator.

The study subject was the economic assessment of university business incubators.

The study object was a university business incubator.

The study aimed to develop economic assessment indicators for four types of university technological, non-technological, project training and mixed business incubators.

Analytical, logical and mathematical research methods were used to achieve this purpose.



The study used scientific works in innovative approaches to developing the university environment, like statistical data and analytical materials.

#### Results

Common indicators include the commercialization coefficient of IAR results and the efficiency coefficient of IAR creation, presented in the article "Academic entrepreneurship in the University community: world and Russian experience" (*Medvedeva, 2023a*) and the appendix (*Table 1*). These coefficients demonstrate the share of commercialized IARs in the total number of IARs, their market demand and payback. This subgroup also includes the following indicators below.

1. The growth rate of jobs created for implementing university's IARs, characterizing the impact of the creation of innovative university units on strengthening economic stability in the region. The creation of new jobs for implementing universities' intellectual property through SIEs will reduce the unemployment rate in the region. The growth rate is determined by the formula:

$$K_{hw} = \frac{n_{cw}}{N_{cw}},\tag{1}$$

where

 $n_{cw}$  is the number of jobs created in SIEs for implementing IAR in the reporting period;  $N_{cw}$  is the total number of jobs created in SIEs for implementing IAR.

To determine the range of values of this coefficient, the author of the study decided to extrapolate the average growth in the number of high-performance jobs in the fields of "Professional, Scientific and Technical Activities" and "Research and Development." The calculation of the growth indicators is presented in the appendix (*Table 2*). The range of values of the indicators is 1,032-1,054. The value of the indicator exceeding the specified limits indicates an increased importance of the activities of the university business incubator on the state of the regional economy. The value of the indicator below the specified range indicates a slight impact (lack thereof) of the university business incubator's activities on the stabilization of the region's economy.

2. The growth rate of the number of licensing agreements concluded by university's SIEs, demonstrating the interest of external users in innovative university developments and determined by the formula:

$$K_{la} = \frac{n_{la}}{N_{la}},\tag{2}$$

where

 $n_{la}$  is the number of licensing agreements concluded by university's SIEs in the reporting period;

 $N_{la}$  is the number of licensing agreements concluded by university's SIEs in the previous period.

The range of values for technological and non-technological indicators is determined according to the average value for the relevant universities in 2023 according to the table in appendix (*Table 3*). The study author suggests setting the optimal range for technological business incubators from 1.8 to 4.5. Since at the moment the number of SIEs created with the participation of socio-humanitarian profile universities is significantly lower than the above range, the author suggests determining the optimal range for non-technological business



incubators from 1.2 to 1.6. The value of the indicator exceeding these limits indicates an increased interest of third-party organisations in the intellectual property of university's SIEs and the positive effect of the university business incubator's mediation activities. The value of the indicator below the specified range indicates either the low demand for IAR of university's SIEs, or the weak intermediary activity of the university business incubator.

3. The share of licensing agreements concluded during the university business incubator exhibitions and conferences, like when the university is represented at external events (this indicator demonstrates the significance of these events and participation in them for the implementation of innovative goods, works and services of the university) in the total number of licensing agreements. The specified indicator is determined by the formula:

$$Y_{la} = \frac{n_{la}}{N_{la}},\tag{3}$$

where

 $n_{la}$  is the number of licensing agreements concluded by university's SIEs in the reporting period;

 $N_{la}$  is the number of licensing agreements concluded by university's SIEs in the previous period.

To determine the values range, consider the example of St. Petersburg State University. The total number of licensing agreements concluded by St. Petersburg State University, according to the monitoring of the higher education institutions' effectiveness in 2023 was 44 (*Monitoring..., 2021*), while the number of licensing agreements concluded by the St. Petersburg State University business incubator was 25. Thus, the share of licensing agreements concluded by the business incubator of St. Petersburg State University is approximately 57% of the total number of licensing agreements. In this regard, the author suggests using this value as the average and the range of optimal values for this indicator from 0.45 to 0.65 of the total number of university licensing agreements. The indicator value exceeding the specified limits indicates the increased significance of these events and the strong dependence of concluding agreements on the university business incubator activities in terms of holding events and participating in them. The indicator value below the specified range indicates either a small number of these activities, or their insignificant impact on concluding agreements for a particular university.

4. The share of the royalties' total amount received from the sale of innovative goods, works and services created at the university's SIEs in the total volume of the university's total cash flows. The indicator demonstrates the significance of cash flows from the joint work of the university business incubator and SIE to finance the university development at its expense. The indicator is determined by the formula:

$$Y_r = \frac{n_r}{N_r},\tag{4}$$

where

 $n_r$  is the amount of royalties received from the sale of innovative goods, works and services created at the university's SIEs;

 $N_r$  is total income of the university.

To determine the area of indicator' optimal values, the author proposes to extrapolate the average value of the R&D income share in the total income of the university for 2023 according to the table in appendix (*Table 4*). For technological incubators, the area of optimal values will be from 0.2 to 0.4. For non-technological business incubators, the optimal values area will be



from 0.04 to 0.06. The value of the indicator exceeding these limits indicates the increased significance of income from the joint work of the university business incubator and SIEs to strengthen the university's financial stability and finance the development of its research activities. The indicator value below the specified range indicates a minor impact of income from the joint work of the university business incubator and SIEs on the financial stability of the university. It is advisable for this indicator to have a positive dynamic over time.

5. The university's SIEs growth rate, supervised by the business incubator, shows the university's interest in commercializing IAR through the creation of SIE and is determines by the formula:

$$K_{hsie} = \frac{n_{sie}}{N_{sie'}},\tag{5}$$

where

 $n_{sie}$  is the number of SIEs created with the participation of the university business incubator in the reporting period;

 $N_{sie}$  is the total number of SIEs founded by the university in the reporting period.

The author of the study suggests to take 3 years preceding the year of calculation as the reporting period, considering the existing, not previously closed SIEs. For the previous period, respectively, data of 3 years preceding the reporting period are used. The author determines the range of specified coefficient values for technological and non-technological business incubators by extrapolating the average value of the number of SIEs presented in appendix (Table 5; Table 6) and determining the minimum and maximum optima based on it. For technological business incubators, the range of optimal values will be from 0.1 to 0.2. It is worth noting that at this stage non-technological business incubators show greater growth, considering the fact that with a total small number of SIEs, a change even by one gives higher growth. For non-technological business incubators, the range of optimal values will be from 0.15 to 0.3. The value of the indicator exceeding the specified limits (1.31-1.5) indicates the high interest of the university in the IAR's commercialization to a greater extent due to SIEs supervised by the university business incubator. The value of the indicator below the specified range indicates that the university is not interested in commercializing IAR in this way. In the case of a high coefficient (more than 1.5), there is a high probability that some of the newly formed SIEs were closed during the billing period. Thus, SIEs that were registered and closed during the billing period is not worth included in this calculation.

6. The university's SIEs attrition rate, supervised by the business incubator, is calculated for the reporting period and is the inverse of the growth rate and is determined by the formula:

$$K_{dsie} = \frac{n_{sie}}{N_{sie'}},\tag{6}$$

where

 $n_{sie}$  is the number of liquidated SIEs in the reporting period, supervised by the SIEs' university business incubator;

 $N_{sie}$  is the total number of SIEs founded by the university in the reporting period.

It is advisable that the specified coefficient's extreme values do not exceed the extreme values of the university's SIEs growth coefficient, in connection with which the author of the study suggests determining their values from 0.1 to 0.3. It is significant to consider that the coefficient value in dynamics should tend to zero.



7. The proportion of liquidated university's SIEs over the entire period of the university's existence, supervised by a business incubator, characterizing what proportion of university's SIEs became to be operating at a loss. The indicator is determined by the formula:

$$Y_{dsie} = \frac{n_{dsie}}{N_{sie}},\tag{7}$$

where

 $n_{dsie}$  is the number of liquidated SIEs for all time;

 $N_{dsie}$  is the total number of SIEs founded by the university.

The author suggests determining their values from 0.2 to 0.4. It is significant to consider that the coefficient value in dynamics should tend to zero.

8. The ratio of the cost of maintaining a business incubator and the university's income from commercialization IAR, characterizing the payback of the cost of maintaining a business incubator from the university's income from equity participation in the authorized capital of SIE in the reporting period, is determined by the formula:

$$K_{c3} = \frac{B_{ui}^1 + \dots + B_{ui}^n}{c_{bi}},$$
(8)

where

*n* is the number of SIEs founded by the university in the reporting period;

 $B_{ui}$  is income of the university from equity participation in the authorized capital of SIEs in the reporting period;

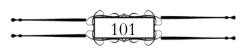
 $C_{bi}$  is the cost of maintaining a business incubator in the reporting period.

In many ways, this indicator is similar to the profitability indicator, in connection with which the author considers it possible to take as a basis the normative values of the average profitability from 1.05 to 1.2, since this interval allows us to assess the stability of the business incubator (*Profitability..., n.d.*). The value of the indicator exceeding these limits indicates an increase in the significance of the university business incubator's activities and the increase in the positive effect of its activities. The indicator value below the specified range indicates either the presence of internal problems of the university business incubator, or the influence of external factors that have a negative impact on its activities.

I.P. Mitrofanova and Yu.V. Zakharova, whose research in evaluating the effectiveness of the university's innovative infrastructure was considered in the author's article (*Medvedeva*, 2023a), propose to evaluate the joint participation of students and SPS in the innovative activities of the university (*Mitrofanova & Zakharova, 2017*). However, the author suggests considering them separately from each other due to the fact that the number of students significantly exceeds the number of university's SPS. In addition, their involvement in the activities of the business incubator should be more significant, as it provides them with the opportunity to implement their research projects by the university. According to the above, the author developed the students and SPS participation coefficients in the business incubator activities.

9. The student participation rate in the business incubator, demonstrating their interest in creating and commercializing IAR through participation in incubation programs, is determined by the formula:

$$K_{ps} = \frac{n_s}{N_s},\tag{9}$$



where

 $n_s$  is number of students participating in incubation programmes;

 $N_s$  is the total number of university students, respectively.

This coefficient was developed on the basis of the students and SPS involvement coefficient in innovative activities by I.P. Mitrofanova and Yu.V. Zakharova, in connection with which the indicator value is similarly determined in the range from 0 to 1. Despite the fact that this indicator should strive for 1, in real conditions its value does not exceed 0.2 (*Mitrofanova and Zakharova, 2017*). At the same time, the author considers it advisable to determine the range of optimal values from 0.2 to 0.4, since in modern conditions one of the university activities is to attract students to innovative activities (*Medvedeva, 2023a*).

10. The coefficient of participation in the activities of the business incubator of full-time SPS, demonstrating their interest in the creation and commercialization of IAR through participation in incubation programmes, is determined by the formula:

$$K_{pspe} = \frac{n_{spe}}{N_{spe}},\tag{10}$$

where

 $n_{spe}$  is the number of SPS participating in incubation programmes;

 $N_{spe}$  is the total number of university's SPS.

This coefficient has similar trends with the coefficient of students' participation in the business incubator activities, in connection with which the author considers it advisable to determine the optimal range of values from 0.3 to 0.5, since in modern conditions one of the university activities is to provide SPS with the opportunity to implement their scientific projects by the university.

11. Savings when SIEs uses the university's preferential trademark by incubation programme' participants, showing the advantage of participating in the incubator programme in terms of brand sharing, is determined by the formula:

$$E_t = \frac{c_{pct}}{c_{fct}},\tag{11}$$

where

 $C_{pct}$  is preferential cost of using the university's trademark for incubation programme participants in the reporting period;

 $C_{fct}$  is the full cost of using the university's trademark for the reporting period.

This indicator's value is calculated only for those universities that provide this benefit to participants of incubation programmes. For other universities, the indicator value is assumed to be 0. Due to the fact that this indicator is rather optional, but recommended for calculation, the presence of an optimal range of values is not mandatory. The author suggests setting the optimal range of values of this indicator in the range from 0.7 to 0.85. The differentiation in calculated values demonstrates the benefits of creating a SIE in a particular university in terms of using a joint university brand.

It is worth noting that most of the listed indicators only indirectly assess the quality of services provided by the business incubator, since it is in some way a tool for commercialization of IAR, an intermediary between the university itself and SIE created on its basis.



Particular indicators of economic assessment for technological business incubators are related to the conduct of development work, the need to use certain equipment and laboratories, as well as the form of research results and payback periods for projects. The following indicators belong to this subgroup below.

1. The share of patents for inventions, utility models, industrial designs and breeding achievements developed and implemented by SIEs in the total number of university patents, demonstrating the degree of SIE's participation in obtaining patents for intellectual property of universities. The indicator is determined by the formula:

$$Y_p = \frac{n_p}{N_p},\tag{12}$$

where

 $n_p$  is the number of patents for inventions, utility models, industrial designs and breeding achievements, developed and implemented SIEs;

 $N_p$  is total number of university patents.

The range of values of this indicator will be determined based on the data on the amount of data from St. Petersburg State University. According to the "Patent. Service," St. Petersburg State University has 170 patents. The St. Petersburg State University business incubator has 12 patents. Thus, the share was 7%. To determine the extreme values, the author of the study suggests considering the difference in indicators between the number of St. Petersburg State University's SIEs and universities with the largest and smallest number of SIEs – TSU and St. Petersburg State Electrotechnical University named after V.I. Ulyanov Lenin "LETI," respectively. According to Table 4, the number of SIEs at TSU is 50% higher than at St. Petersburg State University, while at the LETI it is 81% less (*Table 4*). The optimal range of values for technological business incubators will be from 0.05 to 0.11. The value of the indicator exceeding these limits indicates that the university is striving to commercialize its intellectual property mainly through SIEs supervised by the business incubator. The value of the indicator below the specified range indicates that the university prefers other ways of bringing IAR to the market.

2. The growth coefficient of the SIE technologies released on the market, developed on the basis of the intellectual property of the university and brought income, showing their relative increase in the number of these technologies in the reporting year compared to the previous year, determined by the formula:

$$K_{ht} = \frac{n_t}{N_t},\tag{13}$$

where

 $n_t$  is the number of SIE technologies released on the market, developed on the basis of the university's intellectual property and generating revenue, in the reporting year;

 $N_t$  is the number of SIE technologies released on the market, developed on the basis of the university's intellectual property and generating revenue, in the previous year.

This indicator should be strictly positive. To determine the maximum value, the author decided to extrapolate the average increase in the cost of shipping innovative goods, works and services of his own production in accordance with the appendix (*Table 7*). Thus, the optimal range of values will be from 1.16 to 1.26. The value of the indicator exceeding these limits



indicates the increased importance of the university business incubator in terms of mediation in the release of competitive SIE technologies to the market. The value of the indicator below the specified range indicates either a decrease in inventive activity at university's SIEs, or that the consulting and mediation activities of the university business incubator did not lead to the expected results.

3. Profitability of innovative projects developed at university's SIEs, showing the ratio between costs and profits for each project. The indicator is determined by the formula:

$$R_{ip} = \frac{P_{ip}}{C_{ip}},\tag{14}$$

where

 $P_{ip}$  іs валовая прибыль от реализации инновационных проектов;  $C_{ip}$  іs затраты на разработку и реализацию инновационных проектов.

The author of the study considers it possible to take as a basis the normative values of the average profitability from 1.05 to 1.20, since this interval allows us to assess the stability of the business incubator (*Profitability..., n.d.*). The value of the indicator exceeding these limits indicates an increase in the importance of the university business incubator and an increase in the positive effect of its activities. The value of the indicator below the specified range indicates either the presence of internal problems of the university business incubator, or the influence of external factors that have a negative impact on its activities.

4. Savings in using preferential access to university laboratory equipment for participants in incubation programs, showing the advantage of participating in the incubator program in terms of finding an alternative to equipment leasing, determined by the formula:

$$E_e = \frac{c_{pce}}{c_{fce}},\tag{15}$$

where

 $C_{pce}$  is preferential cost of using the university's laboratory equipment for participants of incubation programs in the reporting period;

 $C_{fce}$  is the full cost of using the university's laboratory equipment for the reporting period.

The value of this indicator is calculated only for those universities that provide this benefit to participants in incubation programs. For other universities, the indicator value is assumed to be 0. Due to the fact that this indicator is rather optional, but recommended for calculation, the presence of an optimal range of values is not mandatory. The author of the study suggests setting the optimal range of values for this indicator in the range from 0.85 to 0.7. The differentiation in calculated values demonstrates the benefits of creating SIEs in a particular university from the point of view of sharing the university's laboratory equipment.

5. The growth rate of inventions and technologies created in SIE, supervised by the business incubator, determined by the formula:

$$K_{hiat} = \frac{n_{iat}}{N_{iat}},\tag{16}$$

where

 $n_{iat}$  is number of inventions and technologies created at SIE, supervised by the University Business incubator, in the reporting period;



 $N_{iat}$  is the total number of inventions and technologies created at SIE, supervised by the university business incubator, in the previous period.

This indicator must be strictly greater than one. To determine the maximum value, the author decided to extrapolate the average value of the increase in the number of advanced production technologies according to the appendix (*Table 8*). Thus, the optimal range of values for this indicator will be from 1.1 to 1.2. The value of the indicator exceeding these limits indicates an increased importance of the university business incubator in terms of stimulating the development of inventions and technologies' SIEs. The value of the indicator below the specified range indicates the stagnation of the development of new inventions and technologies in SIE, supervised by the university business incubator.

6. The efficiency coefficient of the university's investments in SIE implementing technological projects, as well as the cost of maintaining a business incubator, demonstrating the return on invested funds from the income from the implementation of these projects, determined by the formula:

$$K_e = \frac{V}{I + C_{bi}},\tag{17}$$

where

V is the average annual profit of university SIEs implementing technological projects;

*I* is the amount of investment in creating SIE implementing technology projects;

 $\mathcal{C}_{bi}$  is среднегодовая величина затрат на содержание университетского бизнесинкубатора.

Since this coefficient is inherently similar to the profitability indicator, the author of the study considers it possible to take as a basis the normative values of average profitability from 1.05 to 1.2 (*Profitability..., n.d.*). The value of the indicator exceeding these limits indicates an increased importance of the university business incubator and an increase in the positive effect of its activities. The value of the indicator below the specified range indicates either the presence of internal problems of the university business incubator, or the influence of external factors that have a negative impact on its activities.

The indicators of the economic assessment of non-technological business incubators include:

1. The proportion of copyright objects developed by university's SIEs in the total volume of university copyright objects, demonstrating the degree of SIE's participation in the development of protected intellectual property objects of universities. The value of the indicator is determined by the formula:

$$Y_{ok} = \frac{n_{ok}}{N_{ok}},\tag{18}$$

where

 $n_{ok}$  is number of copyright objects developed and implemented by university's SIEs;

 $N_{ok}$  is total number of university copyright objects.

Since this indicator for non-technological incubators is essentially equivalent to the indicator "the share of patents for inventions, utility models, industrial designs and breeding achievements developed and implemented by SIE in the total number of university patents" proposed for evaluating technological business incubators, the author of the study considers it



possible to use a similar range of values from 0.05 to 0.11. The value of the indicator exceeding the specified limits indicates that the university strives to create intellectual property mainly through SIE forces supervised by the business incubator. The value of the indicator below the specified range indicates that the university prefers other ways of creating intellectual property objects of the university.

2. The growth coefficient of income-generating social and humanitarian projects created in SIE, supervised by the business incubator, demonstrating the growth or decline trends of these projects, determined by the formula:

$$K_{hshp} = \frac{n_{shp}}{N_{shp}},\tag{19}$$

where

 $n_{shp}$  is the number of profitable social and humanitarian projects created in SIE, supervised by the business incubator, in the reporting year;

 $N_{shp}$  is the number of profitable social and humanitarian projects created in SIE, supervised by the business incubator, in the previous year.

The specified coefficient must be strictly greater than 1. To determine the maximum value, the author decided to extrapolate the average increase in internal research costs in social sciences and humanities according to the appendix (*Table 9*). Thus, the range of values of this indicator will be from 1.1 to 1.2. The value of the indicator exceeding these limits indicates an increased importance of the university business incubator's activities in terms of mediation during graduation social and humanitarian innovations of SIE to the market. The value of the indicator below the specified range indicates either a decrease in inventive activity at university's SIEs, or that the consulting and mediation activities of the university business incubator did not lead to the expected results.

3. The share of total income for all projects of each scientific direction of the sociohumanitarian sphere in the total income of all socio-humanitarian projects of the university's SIEs (this indicator allows you to determine in which branch of socio-humanitarian scientific knowledge there is the greatest interest in the commercialization of intellectual property of the university). The value of the indicator is determined by the formula:

$$Y_{pshp} = \frac{p_{shp}}{P_{shp}},\tag{20}$$

where

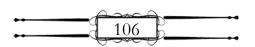
 $p_{shp}$  is the total income of all projects in a certain area of social and humanitarian science;  $P_{shp}$  is total income of all social and humanitarian projects.

This indicator does not require defining areas of values, as it characterizes the economic effect of projects in various fields of science and reflects the specialization of each individual business incubator.

4. The growth rate of private investments attracted through the mediation of the business incubator, which financed social and humanitarian projects, characterizing the activity of the business incubator as an intermediary in establishing business contacts, determined by the formula:

$$K_{hpi} = \frac{n_{pi}}{N_{pi}},\tag{21}$$

where



 $n_{pi}$  is the volume of private investments attracted through a business incubator that financed social and humanitarian projects in the reporting year;

 $N_{pi}$  is the volume of private investments attracted through a business incubator that financed social and humanitarian projects in the past period.

This coefficient must be greater than one. To determine the range of optimal values, the author of the study suggests extrapolating the average annual growth in domestic investment in research and development at the expense of the business sector according the appendix (*Table 10*). The optimal area for the growth rate of private investment in social and humanitarian projects of the business incubator will be from 1.08 to 1.18. The value of the indicator exceeding these limits indicates an increased importance of the mediation activities of the university business incubator and an increase in its positive effect. The value of the indicator below the specified range indicates that the university's mediation activities did not bring the expected results and needs to be improved.

5. The share of long-term social and humanitarian projects in the total volume of the specified university's SIEs projects supervised by the business incubator, characterizing the rationality of the distribution of projects with different deadlines and payback periods, to cover the costs of SIE activities and the functioning of business incubators. The value of the indicator is determined by the formula:

$$Y_{ltshp} = \frac{n_{lgshp}}{N_{shp}},\tag{22}$$

where

 $n_{ltshp}$  is the number of long-term social and humanitarian projects implemented by university SIEs supervised by the business incubator.

 $N_{shp}$  is the total number of social and humanitarian projects implemented by SIE, supervised by the business incubator.

Since the economic effect of long-term projects is stretched over time, the financing of current activities is performed at the expense of income from implementing medium- and short-term projects. In this regard, the author of the study considers it advisable that the share of long-term projects does not exceed the total share of short- and medium-term projects.

6. The efficiency coefficient of the university's investments in SIE implementing social and humanitarian projects, as well as the cost of maintaining a business incubator, demonstrating the return on invested funds from the income from the implementation of these projects, determined by the formula:

$$K_{eshp} = \frac{n * P_{sie}^a}{n * I_{sie} + C_{bi}^a},\tag{23}$$

where

 $P_{sie}^{a}$  is the average annual profit of the university's SIE, which implements social and humanitarian projects;

 $I_{sie}$  is the weighted average value of investments in creating one SIE implementing social and humanitarian projects;

 $C_{bi}^{a}$  is the average annual cost of maintaining a university business incubator;

n is number of SIEs implementing social and humanitarian projects.



Since this coefficient is inherently similar to the profitability indicator, the author of the study considers it possible to take as a basis the normative values of average profitability from 1.05 to 1.2 (*Profitability..., n.d.*). The value of the indicator exceeding these limits indicates an increased importance of the university business incubator and an increase in the positive effect of its activities. The value of the indicator below the specified range indicates either the presence of internal problems of the university business incubator, or the influence of external factors that have a negative impact on its activities.

The economic indicators for evaluating services to project training business incubators include:

1. The growth coefficient of participants in the project training programs of the business incubator, which characterizes the intensity of the business incubator's activities to involve students in entrepreneurial activity through the acquisition of necessary knowledge and competencies, determined by the formula:

$$K_{hpt} = \frac{n_p}{N_p},\tag{24}$$

where

 $n_{pt}$  is number of participants in the project training programs of the business incubator, in the current year;

 $N_{pt}$  is the number of participants in the project training programs of the business incubator in the previous year.

To determine the area of optimal values of the indicator, we will consider the growth in the number of teams participating in LETI's project training programs in 2023 and the growth in the number of participants in the Sberbank youth accelerators. The increase in the number of teams participating in the project training programs of the LETI in 2023 was 1.6 (80 teams in 2023, 50 in 2022) (*Triple axel..., n.d.*). The increase in the number of participants in the Sberbank youth accelerators was 2.5 (*The number..., n.d.*). In this regard, the author considers it advisable to take the optimal range of values of the indicator from 1.5 to 2.05. The value of the indicator exceeding these limits indicates an increased importance of the project training activities of the university business incubator, as well as the growing interest of students in participating in these programs. The value of the indicator below the specified range indicates a decrease in the interest of students in acquiring entrepreneurial competencies and the low efficiency of the business incubator in attracting new participants in project training programs.

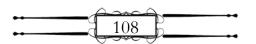
2. The growth rate of the number of graduates of the project training programs of the business incubator who have opened their business, characterizing the impact of the business incubator on the regional economy in terms of the formation of new producers and sellers of innovative goods, works and services, determined by the formula:

$$K_{hg} = \frac{n_g}{N_g},\tag{25}$$

where

 $n_g$  is the number of graduates of the project training programs of the business incubator who have opened their business this year;

 $N_g$  is the total number of graduates of the project training programs of the business incubator who have opened their business.



To determine the area of optimal values of the indicator, we will consider the actual data on the growth of the number of young entrepreneurs in the Russian Federation. In 2021, the growth was 2.5 (*The share..., 2022*), in 2022 – 1.5 (*In Russia..., 2023*), in 2023 – 1,206 (*The authorities..., 2024*). The average annual growth is 1.74. In this regard, the author of the study suggests introducing an optimal range of values for this indicator from 1.3 to 1.74. The value of the indicator exceeding these limits indicates the increased importance of the university business incubator for creating of new enterprises. The value of the indicator below the specified range indicates that the activities of the university business incubator have not brought the expected results and require improvement.

3. The proportion of graduates of the business incubator's project training programs who have started their own business in the total number of graduates of these programs (this indicator demonstrates for which part of the participants in the incubation programs, obtaining services proved to be the most effective). This indicator considers the change in the number of graduates who have started their own business over the entire existence of the business incubator. The value of the indicator is determined by the formula:

$$Y_{ge} = \frac{n_{ge}}{N_g},\tag{26}$$

where

 $n_{ge}$  is the number of graduates of the design and training programs of the business incubator who have opened their own business.

 $N_g$  is the total number of graduates of the design and training programs of the business incubator.

The author of the study suggests determining the optimal range of values for the indicator from 0.25 to 0.50, extrapolating the trend of the maximum and minimum share of people employed in small and medium-sized businesses from the total number of people employed in the economy in 2023 in the regions (*The leading regions..., 2023*). The value of the indicator exceeding these limits indicates the increased importance of the university business incubator for the creation of new enterprises. The value of the indicator below the specified range indicates that the activities of the university business incubator have not brought the expected results and require improvement.

4. The share of commercial organizations in the total number of participants in project training programs, which characterizes the demand for business incubator services from representatives of the private sector of the economy. The value of the indicator is determined by the formula:

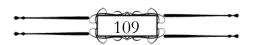
$$Y_{co} = \frac{n_{co}}{N_{pt}},\tag{27}$$

where

 $n_{co}$  is the number of commercial organizations participating in the project training programs of the university business incubator;

 $N_{pt}$  is the total number of participants in the project training programs of the business incubator.

This indicator applies only to those project training university business incubators that work simultaneously with students and commercial organizations, and therefore the author of the



study suggests setting the optimal range from 0 to 0.3, since the main target audience of these business incubators should be students of the relevant university.

5. The share of commercial organizations of graduates of project training programs, whose profits from innovation activities increased after completing these programs, in the total volume of commercial organizations of graduates of these programs (this indicator characterizes the presence of positive changes in the cash flows of organizations after using the services of a business incubator). The value of the indicator is determined by the formula:

$$Y_{co} = \frac{n_{co}}{N_{co}},\tag{28}$$

where

 $n_{co}$  is the number of commercial organizations of graduates of project training programs that have increased profits from innovation activities after completing these programs;

 $N_{co}$  is the total number of commercial organizations graduates of the project training programs of the business incubator.

In order to determine the range of optimal values of this indicator, the author of the study suggests using data on the results of the acceleration program "Axel.Social Order." According to the results of the program, 1/3 of the participants became executors of the social order (*Social order ..., 2023*), in connection with which the author of the study considers it advisable to determine the area of optimal values from 0.2 to 0.4. The value of the indicator exceeding these limits indicates the increased importance of the university business incubator for the creation of new enterprises. The value of the indicator below the specified range indicates that the activities of the university business incubator have not brought the expected results and require improvement.

6. The proportion of projects of various branches of science developed by participants in project training programs in the total volume of these projects, characterizing in which areas of innovation the entrepreneurial competencies acquired during participation in project training programs are most applicable.

$$Y_{pp} = \frac{n_{pp}}{n_{pp}},\tag{29}$$

where

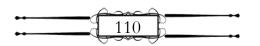
 $n_{pp}$  is the number of projects of some branch of science developed by the participants of the project training programs of the business incubator;

 $N_{pp}$  is the total number of projects developed by the participants of the project training programs of the business incubator.

This indicator does not require defining areas of values, as it reflects the specialization of each individual business incubator and the area of interest of the business incubator participants.

7. The level of satisfaction with the quality of the project training services of the participants of the incubation program, determined by calculating the CSI, which makes it possible to understand how the services of the business incubator meet the needs and expectations of the participants of the incubation programs.

For university business incubators of a mixed type, a set of indicators is used that combines indicators for other types of business incubators, depending on whether this unit coordinates SIE activities of different profiles and project training activities.



#### Conclusion

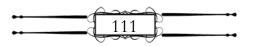
*Thus*, the author developed blocks of indicators for evaluating a university business incubator, considering its type according to the classification of the author of the study: technological, non-technological, project training and mixed. Since the university business incubator is a structural unit of the university, currently economic assessment is more concerned with indirect indicators. The indicators of the economic assessment of university business incubators serve as the basis for developing a methodology to evaluate the services provided by a university business incubator.

#### **Conflict of interests**

The author declares no conflict of interest.

#### **References:**

- Accounting and monitoring of small innovative enterprises in the scientific and educational sphere. (2023, November 3). (In Russ.). https://mip.extech.ru/reestr/reestr/reestr.php
- Gokhberg, L. M. et al. (Eds.). (2020). Indicators of innovation activity: a statistical collection. Moscow: Higher School of Economics. (In Russ.)
- Gokhberg, L. M. et al. (Eds.). (2023). Indicators of innovation activity: a statistical collection. Moscow: Higher School of Economics. (In Russ.)
- Gokhberg, L. M., & Kuzminov, Ya. I. (Eds.). (2020). Indicators of science: 2020: statistical collection. Moscow: Higher School of Economics. (In Russ.)
- Gokhberg, L. M., & Kuzminov, Ya. I. (Eds.). (2023). Indicators of science: 2023: statistical collection. Moscow: Higher School of Economics. (In Russ.)
- In Russia, the number of young entrepreneurs in 2022 exceeded 4.4 million people. (2023). *Novosti*. (In Russ.). https://xn-90aifddrld7a.xn--p1ai/novosti/news/chislo-molodykh-predprinimateley-v-rossii-v-2022-godu-prevysilo-4-4-mln-chelovek/?ysclid=lue3rxau9656088051
- Indicators of innovation activity. (2019-2023). Higher School of Economics. (In Russ.). https://www.hse.ru/primarydata/ii
- Indicators of sciences. (2024, March 3) (In Russ.). Rosstat. https://rosstat.gov.ru/statistics/science
- Indicators of science: 2023. (2023). Higher School of Economics. (In Russ.). https://www.hse.ru/primarydata/in
- Medvedeva, N. K. (2023a). Academic entrepreneurship in the University community: world and Russian experience. *Actual Issues of Modern Science. European Scientific e-Journal*, 25, 32-50.
- Medvedeva, N. K. (2023b). The essence and economic features of university innovation infrastructure formation. *Actual Issues of Modern Science. European Scientific e-Journal*, 27, 7-27.
- Mitrofanova, I. P., & Zakharova, Yu. V. (2017). Modern approaches to evaluating the effectiveness of the university's innovation infrastructure. *Quality. Innovation. Education*, 5(144), 4-5. (In Russ.)
- Monitoring the activities of educational institutions of higher education. (2021, April 13). *Monitoring*. (In Russ.) https://monitoring.miccedu.ru/?m=vpo
- Profitability: What is it, the formula, the types We study the key financial indicator. (n.d.). *Skillbox*. (In Russ.). https://skillbox.ru/media/management/rentabelnost-chto-eto-takoe-formula-vidy-izuchaem-klyuchevoy-finansovyy-pokazatel/?ysclid=lu2t0cicvu304939550
- Regions of Russia. Socio-economic indicators. (2020, August 7). Rosstat. (In Russ.). https://rosstat.gov.ru/folder/210/document/13204#



Social order f	for en	trepreneurs	:: the results of the accelerator "Axel.SocialOrder". (2023, December 18).
Vedomos	ti. (I	n Russ.).	https://www.vedomosti.ru/press_releases/2023/12/18/sotszakaz-dlya-
predprir	nimate	elei-podved	eni-itogi-akseleratora-akselsotszakaz

- State statistics. (2024, March 15). Unified Interdepartmental Information and Statistical System. (In Russ.). https://www.fedstat.ru/indicator/58480
- The authorities named the number of young entrepreneurs in Russia. (2024, January 26). (In Russ.). https://www.rbc.ru/economics/26/01/2024/65b25b139a794706d3729f84?ysclid=lue3ri7yvx877 134374
- The leading regions in terms of public involvement in business are named. (2023, September 11). RLA. (In Russ.). https://ria.ru/20230911/reyting-1895426877.html#:~:text
- The number of participants of the Sber youth accelerators has been named. (n.d.). Rambler. Finance. (In Russ.).

https://finance.rambler.ru/business/52187219/?utm\_content=finance\_media&utm\_medium=re ad\_more&utm\_source=copylink

- The share of young entrepreneurs under the age of 25 in Russia has increased 2.5 times. (2022, January 25). Made in Russia. (In Russ.). https://madeinrussia.ru/ru/news/7603
- Triple axel in the field of startups: LETI is the winner of the All-Russian grant competition for acceleration programs. (n.d.). Committee on Science and Higher Education. (In Russ.). http://knvsh.gov.spb.ru/news/view/6638/

# Appendix

Name of the	The Content of the	Formula	Symbols
Coefficient	Coefficient		
IAR commercialization coefficient	Assessment of the demand for IAR in the market	$K_k = \frac{n_k}{N_k}$	$K_k$ is the coefficient of IAR commercialization; $n_k$ is the number of commercialized IARs of
			the reporting period; $N_k$ is total IARs number of the reporting period.
IAR creation efficiency coefficient	Evaluating the effectiveness of IAR commercialization transactions	$K_c = K_k \times \frac{P_p}{C_p}$	$K_c$ is the efficiency coefficient of creating IAR; $K_k$ is the coefficient of IAR commercialization; $P_p$ is profit from IAR commercialization; $C_p$ is the costs of obtaining IARs and their commercialization.
Growth rate	Assessment of the sustainability of the development of innovative infrastructure, taking into account the dynamics of jobs created by it	$K_g = \frac{n_p}{N_p}$	$K_g$ is the growth rate of the innovation infrastructure; $n_p$ is the number of innovative infrastructure elements created in the reporting period;

Table 1. Efficiency coefficients of the university's innovation infrastructure



Engagement rate	Assessment of the level of involvement of students, postgraduates and university staff in innovative activities	$K_e = \frac{n_{st} + n_{em}}{N_{st} + N_{em}}$	$N_p$ is the total number of elements of the innovation infrastructure. $K_e$ is engagement rate; $n_{st}$ and $n_{em}$ are the number of students and university employees engaged in innovative activities, respectively; $N_{st}$ , $\Pi$ $N_{em}$ are the total number of students and employees of the university, respectively.
Human resource potential coefficient	Assessment of the qualification level of employees	$K_{sp} = \frac{n_{em}}{N_{em}}$	$K_{sp}$ is human resource potential coefficient; $n_{em}$ is the number of university employees, advanced their qualifications in innovative entrepreneurship and technology transfer; $N_{em}$ is the total number of university employees

Resource: Mitrofanova & Zakharova, 2017.

Table 2. The growth	in the number	of high performance	iobs in Russie	$f_{rom} = 2017 \text{ to } 2022$
Table 2. The glowin	In the number	or nigh-periormance	i jobs ili Kussia	1 110111 2017 10 2022

Indicator	2017	2018	2019	2020	2021	2022			
Professional, scientific and technical activities									
Number of jobs	139,801	155,798	164,234	150,741	170,898	179,797			
Growth, %		11.44	5.41	-8.22	13.37	5.21			
	Scie	entific researc	h and develop	pment					
Number of jobs	588,874	605,146	647,855	664,976	678,525	688,862			
Growth, %		2.76	7.06	2.64	2.04	1.52			
$C \rightarrow 11 \rightarrow 1 \rightarrow 1$	$(C_{i}, i_{j}, i_{j},$	020							

Created by the author (State statistic, 2024)

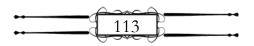
Table 3. Technology exports of the higher education sector from 2012 to 2021

	Table of Teenmology emports of the ingrief education sector from 2012 to 2021									
Indicator	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Export,	2,313	4,443.1	5,970.7	6,359.7	4,416.8	57,986.5	7,232.1	6,1984.2	13,984.1	11,537.2
thousand										
dollars										
Growth,	62.11	92.09	34.38	6.52	-30.55	1212.86	-87.53	757.07	-77.44	-17.50
%										

Created by the author (Indicators of innovation activity, 2019-2023)

#### Table 4. Number of SIEs

University	2019	2020	2021	2022	2023
Tomsk State University	23	28	29	31	33
St. Petersburg State University	16	18	20	20	22
Belgorod State University	19	19	19	19	19
N.E. Bauman Moscow State University	17	17	17	17	17



National Research Technological	15	15	16	16	17
University "MISiS"					
Kazan Federal University	15	15	15	15	15
Moscow Physical Technical University	6	6	6	12	12
ITMO National Research University	8	8	9	10	10
M.V. Lomonosov Moscow State	7	7	8	8	8
University					
Saratov State University	6	6	6	6	6
Peter the Great St. Petersburg Polytechnic	5	5	5	5	5
University					
St. Petersburg State Electrotechnical	4	4	4	4	4
University "LETI"					

Created by the author (Accounting and monitoring..., 2023).

Table 5. Dynamics of internal expenditures on researching and developing educational institutions of Russia's higher education for 2013-2021

Indicators	2013	2014	2015	2016	2017	2018	2019	2020	2021
Internal costs for	63.14	77.98	82.97	80.42	86.84	91.74	100.26	108.34	121.33
research and									
development of									
educational									
institutions of									
higher education,									
billion rubles.									
Growth, %		23.5	6.4	-3.1	7.9	5.6	9.3	8.1	12.0

Created by the author (Indicators of science..., 2023)

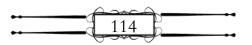
Table 6. The growth in the volume of innovative goods, works, and services in some areas of the service	:
sector in Russia from 2018 to 2021 in percentage	

The service sector	2018	2019	2020	2021
Transportation and storage	-	-	164.49	-34.54
Publishing	-38.03	74.53	9.45	9.89
Activities telecommunications	146.46	-3.50	14.19	119.31
Activities computer software development, consulting services	207.07	121.09	7.63	3.15
Information technology	-13.38	203.47	21.58	268.85
Law and accounting	-	-	36.71	-74.94
Management consulting	-	-	-80.55	-1.19
Architecture and engineering design	35.65	-58.79	129.60	0.15
Research and development	33.84	-16.29	18.06	12.55
Advertising and market research	-	-	13.07	56.40
Activities professional scientific and technical other	-	-	59.19	7.20
Activities in the field of healthcare	-	-	84.16	-39.45

Created by the author (Indicators of innovation activity, 2019-2023)

Table 7. The growth in the number of innovative goods, works and services in Russia

Year	2011	2012	2013	2014	2015	2016
Cost, mln rubles	2,106,740.7	2,872,905.1	3,507,866.0	3,579,923.8	3,843,428.7	4,364,321.7
Growth, %	69.4	36.4	22.1	2.1	7.4	13.6
Year	2017	2018	2019	2020	2021	2022



Cost, mln rubles	4,166,998.7	4,516,276.4	4,863,381.9	5,189,046.2	6,003,342.0	6,377,248.5
Growth, %	-4.5	8.4	7.7	6.7	15.7	6.2

Created by the author (Indicators of sciences, 2024)

Table 8. The growth in the number of advanced manufacturing technologies developed in Russia

0			0	0		
Year	2011	2012	2013	2014	2015	2016
Number of technologies	1,138	1,323	1,429	1,409	1,398	1,534
Growth, %	31.71	16.26	8.01	-1.40	-0.78	9.73
Year	2017	2018	2019	2020	2021	2022
Number of technologies	1,402	1,565	1,620	1,989	2,186	2,621
Growth, %	-8.60	11.63	3.51	22.78	9.90	19.90

Created by the author (Regions of Russia..., 2020).

Table 9. The growth in the number of internal expenditures on research in the Humanities in Russia from 2017 to 2022

	2017	2018	2019	2020	2021	2022	
Research costs	12,983	15,825.90	16,756.50	18,660.00	21.451.90	23.148.50	
Growth, %	2.60	21.90	5.88	11.36	14.96	7.91	

Created by the author (Regions of Russia..., 2020)

Table 10. The growth of domestic investments in research and development at the expense of the business sector in Russia from 2017 to 2022

	2017	2018	2019	2020	2021	2022
Research costs	307,459.0	303,219.2	342,833.0	343,278.0	378,026.0	415,285.7
Growth, %	1.16	0.99	1.13	1.00	1.10	1.10

Created by the author (Regions of Russia..., 2020)



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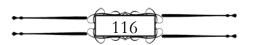
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<sup>[2]</sup> Bakhtin, M. V. (2024). Metaphysical principles of causality and normativity in historical knowledge. *Actual Issues of Modern Science. European Scientific e-Journal, 30*, 24-30. Ostrava: Tuculart Edition, European Institute for Innovation Development. https://doi.org/10.47451/phi2024-04-01

<sup>[3]</sup> Chedia, K. O. (2024). The potential of human consciousness. *Actual Issues of Modern Science*. *European Scientific e-Journal, 30*, 31-37. Ostrava: Tuculart Edition, European Institute for Innovation Development. https://doi.org/10.47451/phi2024-04-02

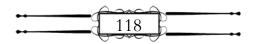
<sup>[4]</sup> Bosson, Y. V. E., Konan, A. G., Méité, A., & Séraphin, K.-C. (2024). Consumption, food habits and potential pathological profiles in the population of the District of Abidjan. *Actual Issues of Modern Science. European Scientific e-Journal, 30*, 38-49. Ostrava: Tuculart Edition, European Institute for Innovation Development. https://doi.org/10.47451/med2024-04-01

<sup>[5]</sup> Mustafayeva, K. K. (2024). Features of developing indicators for the economic assessment of the quality of business incubator services. *Actual Issues of Modern Science. European Scientific e-Journal, 30*, 50-60. Ostrava: Tuculart Edition, European Institute for Innovation Development. https://doi.org/10.47451/art2024-04-01

<sup>[6]</sup> Voloshina, L. A. (2024). The existential meaning of traditional Russian art. *Actual Issues of Modern Science. European Scientific e-Journal, 30*, 61-96. Ostrava: Tuculart Edition, European Institute for Innovation Development. https://doi.org/10.61726/6866.2025.25.59.001

<sup>[7]</sup> Medvedeva, N. K. (2024). Features of developing indicators for the economic assessment of the quality of business incubator services. *Actual Issues of Modern Science. European Scientific e-Journal, 30*, 97-115. Ostrava: Tuculart Edition, European Institute for Innovation Development. https://doi.org/10.61726/9157.2025.11.49.001





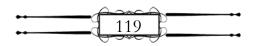
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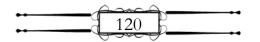
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