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DIGITAL ART OF THE LATE 20TH – EARLY 21ST CENTURY: PARADIGMS AND CULTURAL-HISTORICAL TRANSFORMATIONS

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The dissertation by L.N. Nagornaya "Digital Art of the Late 20th – Early 21st Century: Paradigms and Cultural-Historical Transformations" was completed at the UNESCO Chair of the Institute of Public Administration and Management of the Federal State Budgetary Educational Institution of Higher Education "Russian Academy of National Economy and Public Administration under the President of the Russian Federation" and constitutes a comprehensive study of digital art as a phenomenon of contemporary culture. Scientific Supervisor – Olga Vladimirovna Shlykova, Doctor of Cultural Studies, Professor, Professor of the UNESCO Chair of the Institute of Public Administration and Management, Federal State Budgetary Educational Institution of Higher Education "Russian Academy of National Economy and Public Administration under the President of the Russian Federation".

The relevance of the research is connected with the process of global digitalization of culture: the rapid development of digital technologies and their widespread implementation have led to a profound transformation of all spheres of culture, including art. Having emerged as a phenomenon of the late 20th century, digital art today not only coexists with traditional forms but exerts an increasingly strong influence on them, changing the paradigms of creativity, perception, and the functioning of art in the context of contemporary culture. A consequence of these processes is the necessity for a systematic study of the phenomenon of digital art as part of the cultural landscape of modern society.

In the contemporary world, digital art occupies an important place in the cultural landscape, shaping new trends in cultural initiatives and digital socio-cultural practices. The observed dynamics of the digital art market development since 2023 testify to a steady trend towards a profound digital transformation of the entire cultural and artistic sphere. Such transformation represents a fundamental civilizational shift affecting key aspects of activity: the production, distribution, and consumption of artworks, and in a broad sense – their existence, conditioned by the pervasive integration of digital technologies, scientific achievements, and contemporary culture.

By early 2026, the global digital art market, predominantly fine art, had reached a volume of 5.8 billion dollars. According to forecasts, the average annual growth rate of the market from 2025 to 2032 will be 17.3%, allowing the market to reach a volume of 17.72 billion dollars by 2032. This trend is actively gaining momentum in contemporary Russia as well, confirming the global nature of both world and domestic digital transformation of culture and art.

At the same time, in the context of emerging multipolarity, the research task of comprehending digital art as a space for representing and transmitting national cultural codes becomes relevant. Analyzing digital creativity through the prism of national identity allows for identifying the specifics of cultural narratives in a globalizing digital landscape and determining the role of new technologies in preserving cultural distinctiveness and diversity, as well as the mechanisms for adapting traditional aesthetic principles in the digital space.

In contemporary cultural studies, a trend has emerged towards the appearance of a fundamentally new, hybrid-in-nature institutional ecosystem of digital art. Adaptation of traditional institutions (museums, universities, etc.) is taking place, as well as the creation of native cultural forms (online platforms, DAOs): specialized exhibition spaces, educational programs, art markets, etc. But simultaneously, an independent theoretical discourse is forming, contributing to the recognition of the studied phenomenon and its formalization as an independent research direction.

This trend is supported by the academic community, reinforced by the growing interest of actors, which is conditioned by new cultural demands and emerging socio-cultural contexts, contributing to the expansion of the boundaries of digital creativity and art and strengthening their influence on culture as a whole. This dialectical interdependence of scientific progress and art, and their cultural dynamics, enrich the methodological toolkit and theoretical foundations of artistic practices in digital art, dictate a revision of classical aesthetic categories, giving rise to hybrid formats of artistic expression. Furthermore, they expose a deeper process – a total transformation of the cultural landscape, in which the digital environment is transformed into a space of cultural meanings, producing and hosting new social

experience. The process of mutual determination of technological innovations and cultural transformations gives rise to a fundamentally different ecosystem of artistic production and reception, within which digital practices act as a catalyst for a fundamental reconsideration of the foundations of communicative experience for the individual and society as a whole. This is, first and foremost, a transformation of the aesthetic perception of "cultural texts," the generation of new forms and formats of interaction, a revision of traditional artistic paradigms, and a structural restructuring of the entire architectonics of socio-cultural space under the influence of societal digitalization.

Undergoing an evolutionary transition from an avant-garde niche phenomenon to the status of a legitimized institutional element, digital art not only enriches the cultural environment with innovative artifacts and concepts but also actively shapes new cultural paradigms.

Studying the specifics of digital art's functioning, its semantic transformations, and its influence on the socio-cultural landscape acquires particular relevance. Despite the existence of certain theoretical foundations of digital art as an independent cultural phenomenon, its further deep and comprehensive comprehension is required, particularly concerning innovative methodological approaches adequate to the multifaceted nature of the studied phenomenon, the prospects of digital art in the context of a rapidly changing society, the spread of smart technologies, and paradigmatic shifts in the sphere of artistic creativity, including risks of commercialization, loss of authenticity, issues of copyright, and digital inequality.

In other words, the relevance of this research is determined by the following factors:

The need to form a holistic theoretical and methodological basis for the systematic study of the phenomenon of digital art, including an interdisciplinary approach at the intersection of cultural studies, anthropology, philosophy of art, media studies, and digital humanities. In contemporary scientific discourse, terminological inconsistency persists in defining this phenomenon, indicating a lack

of conventional understanding of its essential characteristics. The insufficient study of the cultural potential and transformational resource of digital art, especially its role in the mechanisms of contemporary cultural genesis, requires a systematic rethinking of its status and functions within modern artistic practices and the institutions of a transforming cultural system. This implies the development of new epistemological foundations for its analysis in the conditions of the contemporary digital era.

The study of digital art in the context of a new cultural paradigm (in particular, the communicative-digital one) allows for comprehending its evolution, including under the influence of forms and formats of digital civilization, and forecasting the directions of its further development in the multidimensional paradigm of culture as a strategy for the development of the contemporary elusive "evasive reality".

Despite existing works on this topic, its ontology and dynamics in the context of profound socio-cultural transformations determining their development remain understudied. The fact is that the level of technological development and scientific achievements influencing and permeating contemporary art fundamentally distinguishes late 20th-century digital art from new-generation digital art, both at the level of studying the phenomenon and the methodology, which is distinguished by a "transitory character" and post-conceptualism with an orientation toward progress. This manifests the methodological distinctiveness in researching approaches to the conceptual apparatus formed within classical, evolutionary, and co-evolutionary frameworks in the humanities.

The transdisciplinary nature of digital art, stemming from its unique position at the intersection of art, science, technology, and socio-cultural practices.

The formation of a new multi-channel communication system.

The influence of neural networks, artificial intelligence on artistic creativity, the transformation of the concept of authorship and copyright in the context of digitalization, and the doctrinal and legal foundations concerning "digital" moral and ethical standards about humans in the era of digital civilization.

The need to develop mechanisms for supporting and developing digital art by adapting cultural and educational programs to the new realities of the digital era, as well as forming an effective system of professional training in this field.

Extent of Problem Development.

The formation of cultural studies discourse around digital art represents an extensive and multifaceted area of scientific inquiry, attracting researchers from various disciplines: cultural studies, philosophy, art history, sociology, media theory, and law. Analysis of existing scientific literature allows for identifying several key research directions shaping the contemporary landscape of the problem's study.

Theoretical and cultural-philosophical foundations for understanding digital culture were laid by classics of media theory and philosophy (M. McLuhan, M. Castells, W. Benjamin, J. Baudrillard, T. Adorno, M. Horkheimer, M. Heidegger, L. Mumford, G. Deleuze, F. Kittler, J. Ortega y Gasset, K. Popper), whose concepts (on media influence, network society, technical reproducibility, simulation, critique of the culture industry) form the necessary basic foundation for the research. In Russian science, the context of digital art is developed by researchers of media culture (L.B. Zubanova, N.B. Kirillova, E.N. Shapinskaya, O.V. Shlykova, etc.), information and Internet society (K.K. Kolin, A.A. Lisenkova), cultural policy and cultural synergy (O.N. Astafieva, S.B. Sinetsky, etc.), media philosophy (S.V. Komarov, V.V. Savchuk, D.P. Khamolainen, etc.), problems of virtuality and aesthetics (V.V. Bychkov, N.B. Mankovskaya), screen culture (K.E. Razlogov), genesis of digital culture (D.V. Galkin, T.F. Kuznetsova, S.A. Simonova, O.V. Shlykova, etc.) and its utopian and humanistic potential (I.D. Tuzovsky), etc.

Philosophical and cultural aspects of the digital environment are also studied by R.R. Budagyan, I.N. Volnov, D.Yu. Gorelyshev, M.N. Dolgikh, E.V. Zhagun-Linnik, A.V. Solovyov, etc. Particularly significant are the integrative approaches of A.V. Venkova, I.A. Kuptsova, N.B. Mankovskaya, K.E. Razlogov, V.V. Savchuk, T.N. Suminova, creating a comprehensive theoretical and methodological basis for analyzing digital art and creative industries.

Philosophical and aesthetic aspects of digital art include the analysis of its ontology, specifics of perception, transformation of aesthetic categories, and axiology of digital art. Fundamental research on the aesthetics of digital visual art has been conducted by S.V. Erokhin. Social-philosophical analysis is contained in the works of A.S. Zavyalov. Key principles of the "language of new media" have been identified by L. Manovich. Analysis of symbolic systems has been proposed by N. Goodman and A.S. Migunov. The aesthetics of simulacra in digital music have been studied (O.A. Gubanov), axiological aspects of digital art (E.E. Drobysheva, S.A. Simonova, etc.), specifics of perceptual experience (A.A. Denikin), the phenomenon of the techno-sublime (K.E. Fedorova), expressive means of screen arts (V.F. Poznin). Historical-cultural aspects, including the influence of cybernetics on humanitarian thought and artistic practice in the USSR, have been studied by Ya. Prudenko.

The transformation of traditional arts and new forms of digital creativity represents an extensive block of research. The influence of digitalization on cinema (D.Yu. Nekrasov, V.N. Novikov, etc.), music (V.V. Gromadin), photography (A.V. Surkov) is studied. Media art as an independent field is analyzed (A.A. Denikin, K. Paul, T.E. Fadeeva, A.V. Chernyshov, I.I. Yugay). The newest forms are explored: NFT art (Jinghao Xiong), generative art (S.S. Gribov, R.V. Lukichev, etc.), computer graphics (A.V. Vasilyev), video games (T.K. Ermakov, M.V. Shibaev), digital design (A.N. Lavrentiev, O.I. Shustrova, O.G. Yatsyuk), Science Art (D.Kh. Bulatov, S.V. Erokhin, S.P. Polozov, etc.), media in neo-avant-garde (I.B. Sokolova), digital public art – E.A. Kartseva, L.N. Nagornaya, O.V. Shlykova, etc.

Socio-cultural, institutional, and legal practices become the object of analysis of the massification of art (V.L. Alikhanova, T.I. Erokhina, A.V. Kostina, E.P. Smolskaya), social functioning (Yu.V. Strakovich), and the development of memory institutions and cultural heritage (I.A. Kizhner, O.B. Serostanova, Liao Yanni, etc.). An independent area consists of research on legal problems related to the creation, distribution, and use of digital art, including issues of copyright and

intellectual property (K.A. Akhramkina, A.V. Gurko, N.V. Lopatina, O.P. Neretin, etc.), problems of digital identity (E.M. Burnaeva, A.A. Lisenkova) and communication, including network communication (T.A. Bulatova, M.N. Bychkova, I.V. Guzhova, I.P. Kuzheleva-Sagan, A.R. Medvedeva, S.S. Nosova, N.A. Romanov, etc.).

At the same time, it is necessary to note the insufficient development in contemporary scientific literature of a comprehensive approach to the phenomenon of digital art, considering its multifaceted nature combining artistic imagery and the properties of a communicative system. This actualizes research into the specifics of its production, perception, and interpretation in the context of modern cultural and technological transformations. In contemporary scientific research, *two main approaches* to studying the phenomenon of digital art are observed:

1.   Holistic and 2) Narrowly specialized. The first, represented in the works of A.A. Denikin, E.E. Drobysheva, T.F. Kuznetsova, T.E. Savitskaya, S.A. Simonova, etc., is characterized by covering a wide range of problems and aspects related to digital art for a more comprehensive disclosure of the studied phenomenon. The second – the narrowly specialized approach, applied in the works of V.V. Gromadin, Yu.V. Strakovich, E.N. Shapinskaya (music), D.M. Nekrasov (cinema), S.V. Erokhin (theater), A.L. Mileyko (dance), is focused on studying specific aspects of digital art, such as technological innovations, aesthetic trends, socio-cultural processes, or specific genres: AI – G.I. Zvereva, Yu.V. Kitov, M.M. Lariontsev, etc.

Despite existing approaches, a detailed refinement of definitions reflecting the essence of this phenomenon, considering new transformations, in identifying key characteristics for forming an academic understanding of the place and role of digital art in the contemporary cultural landscape, seems advisable, to form a more solid basis for further research. It is necessary to identify the preconditions and conditions for the rapid expansion of digital space, justify the ontological foundations for the emergence of digital art, and study the specifics of the phenomenon of digital art, the features of the emergence, perception, and dissemination of digital works.

Thus, the current stage of studying digital art is characterized by a significant degree of formation of a theoretical foundation covering its aesthetic, typological, and socio-cultural aspects. Nevertheless, the identification of a number of significant research gaps determines the relevance of further searches in this subject area. Based on this, for an adequate comprehension of the cultural-historical transformations and paradigm shifts characteristic of digital art at the present stage, the implementation of a comprehensive cultural analysis aimed at studying value determinants, socio-cultural mechanisms of functioning, and the influence of the latest technologies on the dynamics of artistic values acquires particular scientific significance. This choice is conditioned by the need to fill existing gaps and deepen the understanding of the studied phenomenon in its historical-cultural dynamics.

Formulation and Solution of the Scientific Research Problem lies in identifying contradictions between the existing problem field of digital art and the absence of thorough studies related to comprehending the genesis, stages, ontological status, and specifics of representing digital art in the context of contemporary cultural paradigms.

Object of Research – digital art in its developmental dynamics.

Subject of Research – paradigms and cultural transformations of digital art at the present stage.

Research Goal – to substantiate the informational-communicative nature of digital art of the late 20th – early 21st century as a conceptually independent direction of art, demonstrating a departure from preceding communicative practices and arising at the intersection of the synthesis of technology, science, and art.

In accordance with the stated goal, the following **research tasks** have been defined:

To examine the genesis and stages of digital art in the context of cultural-historical and technological factors influencing its development;

To determine the ontological status of digital art as a cultural phenomenon and summarize methodological approaches to its interpretation, including the specifics of the transdisciplinary synthesis of scientific, technological, and artistic knowledge;

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To substantiate the status of digital art in the contemporary cultural-artistic paradigm, influencing worldview and the understanding of the world picture, entering into complex dialectical relations with new and inherited cultural forms and values;

To identify the main formats of existence of digital art in contemporary socio-cultural space, key communicative strategies, and cultural practices of its functioning based on Russian and foreign experience;

To outline the essential features of digital art and the inevitable reflection of cultural codes within it, as well as to identify the features of its perception by the contemporary audience;

To investigate the lines of conjunction between digital art and legal culture (including issues of authorship and intellectual property).

To substantiate the prospects of digital art in reproducing a new generation of creative personnel and the potential of digital art as an innovative educational platform.

Theoretical and Methodological Basis of the Research. The specifics of digital art necessitate the application of a multifaceted research methodology.

As the theoretical and methodological foundation of our research, a *systemic cultural approach* (M.S. Kagan, E.M. Markaryan, A.Ya. Flier) has been chosen, according to which digital art is understood as a multi-level open and dynamic system in a state of continuous dialogue with technological and socio-cultural contexts; the cultural-historical approach provides a broad perspective for analyzing its genesis and evolution (from proto-digital forms to multimodal and multisensory practices).

The *axiological approach* (G.P. Vyzhletsov, D.S. Likhachev, A.V. Sokolov, I.D. Tuzovsky) is applied in determining the socio-cultural status of digital art[^5], recording and revealing the experience of the subject's perception and interaction with a digital work (immersiveness, interactivity, presence).

The semiotic approach allows considering digital art as a sign system and decoding the meanings embedded in it. Relying on the *semiotic understanding of*

culture and text and research by: R. Barthes (cultural codes in various types of digital art), J. Baudrillard (with his concept of simulacra and hyperreality, where things become carriers of meanings), Yu.M. Lotman (possibility of studying symbols of the rational and irrational), U. Eco (open and "closed" work) – these have found reflection in the comprehension and generalization of artistic practices, etc.

The *informational-communicative approach* is applied as a methodology for the scientific cognition of the world picture, where not just new channels and methods of information transmission are analyzed, but, above all, the content being transmitted, allowing for the decoding of socio-cultural codes of identity in its various manifestations.

The methods used in the dissertation can be grouped into four interpenetrating blocks:

For reconstructing the genesis and trajectories of digital art development, as well as its integration into a broad historical and cultural context, the *historical (chronological) method* is applied, allowing for tracing the stages of formation and identifying the connection with preceding artistic and technological phenomena, and the method of cultural-historical analysis, focusing on the interrelation of digital art with the processes of globalization, the formation of network society, and the information revolution. The *comparative (comparative) method* is used to identify the specifics of digital art by comparing it both with traditional art forms and with various forms within the digital field itself (net.art, VR-art, generative art, AI, etc.). Elements of media archaeology are drawn upon for analyzing the influence of early or obsolete technologies on the formation of digital art aesthetics.

Analytical and interpretative methods. For a detailed study of digital artworks, formal analysis is used, aimed at identifying specifics of composition, interactive elements, and other formal characteristics. *Conceptual analysis* is applied for researching the ideological and philosophical basis of works, often explicated in authorial texts. The specificity of the digital environment also requires the application of discourse analysis to understand how meaning is formed in digital

art, for comprehending the role of code, algorithms, and software as an integral part of the medium and the content of the work. The dialectical method is used to identify and analyze essential contradictions of digital art (the dichotomy of virtual and real, material and immaterial, authorial and collective, etc.), and to analyze its complex dialectical interaction with traditional cultural forms.

Empirical and sociological methods. For obtaining data on real practices of creation, distribution, and perception of digital art, as well as for studying its social functioning, empirical methods, often with a sociological orientation, are employed (case study methods, survey (questionnaire)).

Key is the principle of *transdisciplinary integration*, where these methods are not simply summed up but interact, mutually enriching each other: for example, media archaeological analysis of technological conditions is supplemented by the semiotics of the interface, and digital analytics data are interpreted through the prism of institutional sociology. Such synthesis allows overcoming traditional disciplinary boundaries and implementing a holistic cultural analysis, revealing digital art as an indivisible fusion of aesthetic gesture, technological act, communicative practice, and a factor of cultural dynamics.

The application of the chosen methodological strategy ensures the possibility of a comprehensive and all-encompassing analysis of digital art as a complex phenomenon of contemporary culture, allowing for overcoming the limitations of narrowly specialized research approaches.

Validity and Reliability of the Research Results are ensured by the application of normative legal acts regulating the work of institutions related to digital art, a complex of methods and approaches used in cultural studies knowledge, which representatively present data from state and industry statistics, as well as materials and results of published sociological research.

Scientific Novelty of the Research lies in the following:

- The stages of digital art of the late 20th – early 21st century are substantiated (from the stage of visual forms to audiovisual synthesis and further transition to contemporary multimedia and multisensory practices),

determining the transformation of artistic language, the perception of cultural texts, and the entire system of digital art institutions;

- It is established that the emergence of digital art in all its diversity is owed not only to the appearance of its new communicative forms and formats but, first and foremost, to a change in cultural paradigms. Alongside the network and other paradigms, the informational-communicative paradigm of digital art acts as dominant;

- The key factors of transdisciplinary synthesis in digital art are identified and systematized, including technological (digital tools, VR/AR, AI, etc.), cultural-social (globalization, massification of culture, changing role of the viewer, media convergence, etc.), and artistic-conceptual (experimentation, rethinking of values, synthesis of artistic-communicative systems). The specifics of their influence on cultural practices, the formation of new forms of expressiveness, and interaction with the audience are revealed;

- It is established that digital art represents a complex dynamic ecosystem in which its national specificity and global universal cultural processes (including technological ones) intersect, thereby demonstrating digital art's ability to simultaneously incorporate universal features of culture (network organization, interactivity, and transmediality) and preserve authentic cultural codes inherent to various regions and peoples of the world, ensuring dialogue and mutual enrichment of the global and local;

- The concept of authorship in digital art is refined as a dynamic category possessing a number of specific characteristics, such as: 1) expanded subjectivity, manifested in the inclusion of artificial intelligence in the creative process, which calls into question traditional ideas about creative individuality;

2. the procedural nature of digital works, existing as constantly evolving artifacts, contradicts classical criteria of the completeness of an artwork;

3.   the technological determinism of digital art creates a fundamental dependence of the creative process on the platforms and tools used, and the collaborative potential of the digital environment opens new possibilities for co-authorship on a global scale and requires a rethinking of traditional copyright models;

•   An institutional approach to training specialists in the field of digital art with a set of professional and informational-communicative competencies at the intersection of art, technology, and the humanities is substantiated, applicable to such directions and specializations as digital artist, XR-designer, curator of a virtual museum, art technologist, virtual environment art master, AI artist, specialist in blockchain technologies in art (NFT manager, crypto-art consultant), specialist in data visualization in art, developer of immersive installations, sound designer for virtual spaces, digital content producer, manager of virtual events, etc.

Overall, the results of the dissertation make a significant contribution to the development of the theory and history of culture, enrich cultural studies knowledge with new approaches to comprehending contemporary art in the era of digital civilization, opening promising directions for further research on this topic.

Main Research Results and Propositions Submitted for Defense:

Digital art of the late 20th-early 21st century is a unique cultural-civilizational phenomenon possessing its own ontology, history of development, a system of artistic practices, and actively influencing the transformation of cultural values and meanings in the era of rapid processes of mediatization and digitalization. This definition of digital art takes into account its specificity as a transmedial phenomenon existing at the boundary of physical and virtual spaces, reflects the natural stages of the evolution of artistic culture in the context of technological and socio-cultural transformations at the turn of the 20th-21st centuries. At the same time, the given definition of digital art fixes the language of culture and revises modes of interaction, forms new systems of art perception, including multisensory perception, where traditional visual components (light and color solutions) are

organically combined with tactile, olfactory, and similar sensory modalities, stimulating the birth of new art institutions. The formation and development of digital art occur through a natural evolution of forms – from early visual experiments to complex multimedia and multisensory practices, which testifies to a civilizational shift in contemporary culture.

The emergence of digital art in all its diversity is owed not only to processes of rapid cultural transformation but, first and foremost, to a change of paradigms in culture and art, which determined the development of the global cultural context. The change of cultural paradigms led to the dominance of the informational-communicative paradigm of digital art in the late 20th – early 21st century. Such a change influenced profound transformations of cultural values, cognitive mechanisms of perceiving the "cultural text," the entire architectonics of contemporary art institutions in the context of global processes of digitalization and mediatization. The new communicative matrix, based on the principle of multisensory dialogue, allowed for supplementing/expanding the traditional visual channel with tactile, olfactory, and kinesthetic modalities. Instead of the linear unidirectional logic of classical aesthetic communication, a multi-channel interactive cultural-communicative system has been established in digital art.

Transdisciplinary synthesis acts as one of the fundamental characteristics of digital art, formed at the intersection of the integration of art, science, and technology. This leads to a qualitative transformation of all aspects of the artistic practice of digital art. *The nature of the creative process changes* (from individual authorship to network collaborations, including with the participation of neural networks and artificial intelligence, up to the erasure of boundaries between author, work, and recipient). *The morphology of the work transforms* (from a static object to dynamic adaptive systems in creating new forms of artistic expressiveness and expanding the territory of cultural space). *The principles of interaction with the audience are reconsidered* (from passive contemplation to active participation through interfaces of tactile and biometric interaction, etc.). The transdisciplinary approach provides the necessary toolkit for analyzing digital art as a complex, multi-

level phenomenon, allowing for moving beyond considering technologies solely as a means.

The study of digital art, its contemporary phase, is based on a systemic comprehension of paradigms as a set of concepts, including theories, postulates, and standards, as well as the cultural-historical transformations of the phenomenon that have occurred in the last decade and even five years. Indicative in this context are examples of the appearance of fundamentally new artistic-communicative formats (neural network aesthetics, immersive spaces with biometric feedback, tokenized art objects, etc.)

Digital art as a dynamic ecosystem generates new communicative strategies for interaction with the audience, contributing to the formation of a heterogeneous cultural space of a glocal character, within which global trends in art development coexist with the preservation of national-cultural identity, determined by the specifics of the socio-cultural context, the semiotic systems of culture, and established communicative practices. Russia, China, Japan, the USA, and other countries demonstrate manifestations of cultural codes in various communicative formats of digital art. [For example, Chinese media artists embody national traditions in high-tech projects: VR installation by Cao Fei "Virtual Calligraphy" and NFT project by Zhang Yajiu "Dragon Dance," created using 3D modeling and blockchain technologies. [Works by Japanese artist Tatsuo Horiuchi (e.g., "Mt. Fuji and Mountain View through Cherry Blossoms") reveal characteristic national images using the spreadsheet editor Microsoft Excel. Global recognition is received precisely by those works that are rooted in national tradition, refuting the thesis of the leveling impact of globalization and testifying to new possibilities for the development of cultural traditions in the era of digital transformation. The result of new communicative strategies is the formation of hybrid communicative environments, a product of trans- and interdisciplinary synthesis integrating technological protocols, bodily practices, and semiotic cultural systems. This opens for contemporary art the possibility of functioning as an active

instrument of cultural reflection, engaged in dialogue with the key anthropological and socio-cultural challenges of the era.

The development of digital art forms fundamentally new doctrinal-legal and moral-ethical relations. Analysis of contemporary practice in creating and distributing digital artworks has shown that traditional constructs of intellectual law demonstrate problematic situations in attributing objects of cultural heritage in conditions of collective creativity, the specifics of legal regulation of NFTs, as well as insufficient effectiveness in determining the legal status of artworks created with the help of neural networks, blockchain technologies, and other digital creative tools. Research on the role of AI in art allows for a deeper and through another, "inalienable alien," understanding of the role of modern technologies in preserving, disseminating unique masterpieces, and "expanding" knowledge about art. At the same time, assessing the challenges of digital expansion and potential risks of possible falsifications and destruction of the authenticity of cultural and artistic texts, it is necessary to rely on a balanced approach in using AI in the human world and humans in new worlds, preserving "human identity" in intellectual-cultural-creative activity.

The development of digital art inevitably entails the improvement of cultural education, the emergence of new directions and specializations in training. The system of personnel reproduction begins to transform considering the specifics of the modified sphere of art and culture. A new institutional environment is forming, based on more advanced levels of informational and digital competencies corresponding to civilizational breakthroughs and the society's value orientations. The prospects of digital art are associated with the emergence of new subjects and objects of cultural interaction, influencing the value-semantic components of the culture and education of the future.

Theoretical Significance of the Research lies:

In contributing to the development of cultural studies knowledge, expanding ideas about how technological innovations transform not only artistic practices but the entire system of social relations embodied in art;

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In forming new approaches to understanding the stages of digital art and artistic creativity in conditions of digital transformation (in particular, informational-communicative, transdisciplinary synthesis);

In developing the concept of "diffuse authorship," reflecting the new nature of creativity in the digital era; creating a comprehensive methodology for studying the legal aspects of digital art;

The obtained results and conclusions of the research possess **practical significance** and can be integrated into the teaching of academic disciplines in such areas as applied cultural studies and art history. The research results can be used in project developments, festivals, and competitions on digital art, media art, new technology art, and in educational programs dedicated to the influence of digital technologies on culture.

The practical significance of the research is confirmed by an implementation act, drawn up based on the results of testing the dissertation materials in the process of teaching the subject "Music Literature (Foreign and Domestic)" at the Federal State-Funded Professional Educational Institution "Moscow Military Music College named after Lieutenant-General V.M. Khalilov" of the Ministry of Defense of the Russian Federation. The main propositions of the dissertation were also used during the pedagogical practice of the postgraduate student in seminar classes with full-time (daytime) students in the field of study 42.03.02 "Journalism, Producing, and Cultural Policy," educational program B1.O.03 "Cultural Studies" at the UNESCO Chair of the Institute of Public Administration and Management of the Russian Academy of National Economy and Public Administration under the President of the Russian Federation.

The materials of the work can find application in conducting large-scale research by social institutions, public organizations, and government bodies, as well as in formulating a cultural strategy for the digital development of the country's creative sector.

Correspondence of the Dissertation to the Passport of the Scientific Specialty. The work is performed in accordance with the areas of research indicated

in the passport of the scientific specialty HAC 5.10.1 – "Theory and History of Culture, Art": p. 25 "Art as a Phenomenon of Culture," p. 13 "Art as a Social Phenomenon. Social Functions of Art," p. 38 "Culture and Communication. Intercultural Communications," p. 72 "Semiotics of Culture. Its Principles and Approaches," p. 43. "Predictive Functions of Culture. Culture and Futurology." This is confirmed by the fact that the research is aimed at studying the paradigms and cultural-historical transformations of digital art as a significant phenomenon of contemporary culture, forming in conditions of global digitalization. The work is based on a comprehensive analysis of cultural, historical, philosophical, and sociological aspects of its formation and development. In particular, the origins (genesis) and evolution of digital art, the processes of its convergence with traditional forms of artistic creativity, as well as the multifaceted influence of digital technologies on contemporary cultural practices and modernization processes in the artistic sphere of the late 20th – early 21st century are analyzed.

Testing of the dissertation research findings was conducted at the following scientific conferences and symposia:

1. 06 November 2025, P.A. Serebryakov Volgograd State Conservatory. All-Russian Round Table "Artificial Intelligence in Music Education: From Theory to Practice." Presentation: "Artificial Intelligence in the Space of Contemporary Culture: New Paradigms of Creativity."

2. 16 October 2025, Saint Petersburg State University. Fifth Saint Petersburg International Culturological Symposium. Presentation: "Transdisciplinarity in Contemporary Digital Art: From Trend to a New Cultural Paradigm."

3. 03 October 2025, Russian Presidential Academy of National Economy and Public Administration (RANEPA). All-Russian Scientific-Practical Conference "Culturology in Modern Socio-Humanitarian Knowledge: Scientific-Theoretical Foundations and Educational Technologies." Presentation: "Digital Art as a Field of Interaction Between Global and Local Discourses."

4. 23-24 September 2025. International Scientific-Practical Conference "Man and Artificial Intelligence: Trends in Educational Development in the Age of

Artificial Intelligence." Moscow, Saint Petersburg, Kazan. Organizers: Main Personnel Directorate of the Russian Ministry of Defense, Russian Academy of Education, Moscow Cadet Corps "Boarding School for Female Students of the Ministry of Defense of the Russian Federation." Presentation: "Artificial Intelligence as a Cultural Phenomenon: The Transformation of Creativity in the Digital Era."

5. 11 September 2025, D.S. Likhachev Russian Research Institute for Cultural and Natural Heritage. XI International Scientific Forum "Cultural Heritage of the North Caucasus as a Resource for Interethnic Harmony." Presentation: "The Collective Feat of the Soviet People in Digital Memory: Virtual Reconstructions of the Battle of Stalingrad."

6. 04 February 2025; P.A. Serebryakov Volgograd State Conservatory. All-Russian Round Table "The Battle of Stalingrad in the Historical and Cultural Memory of Peoples," dedicated to the Victory in the Battle of Stalingrad, timed to the Year of the 80th Anniversary of Victory in the Great Patriotic War and the Year of Unity in the Fight Against Nazism. Presentation: "The Representation of the Battle of Stalingrad in Interactive Media: From Computer Games to VR Projects."

7. 09 December 2024; III International Conference "Scientific Readings at the Ural Conservatory" (dedicated to the 90th anniversary of the university), Yekaterinburg. Presentation: "Digital Media as a Factor of Transformations in the Musical Avant-Garde of the Early 21st Century."

8. 05 December 2023; V.A. Bosikov Higher School of Music of the Republic of Sakha (Yakutia) (Institute). International Scientific-Practical Conference "Music. Education. Personality" (dedicated to the 30th anniversary of the Higher School of Music of the Republic of Sakha (Yakutia) (Institute) named after V.A. Bosikov). Presentation: "Multimedia Technologies as an Innovative Component of Modern Professional Music Education."

9. 17 November 2023; Ural Federal University named after the first President of Russia B.N. Yeltsin. International Scientific-Practical Conference (XVIII Kolosnitsyn Readings) "New Trends in the System of Modern Culturological

Education as a Basis for Worldview Training." Presentation: "The philosophy of partnership between educational, cultural and arts institutions in the creative space of a metropolis."

10. 03 November 2023; A.P. Borodin Children's Music School. Borodin forum "The connecting thread of times – from master to student," dedicated to the year of the teacher and mentor and the 190th anniversary of the birth of the outstanding composer and scientist-chemist Alexander Porfiryevich Borodin. Presentation: "Game-based multimedia technologies as an educational resource (on the example of studying the works of russian composers in the 'music literature' course)."

11. 19 May 2023; Russian Presidential Academy of National Economy and Public Administration (RANEPA). International Conference Session "Public administration and development of russia: civilizational challenges and national interests"; section "System of training personnel for organizations of culture, science and education." Presentation: "Electronic Educational Courses 'The humanities in the art of winning': conceptualization and usage technologies."

12. 19 May 2023; Russian Presidential Academy of National Economy and Public Administration (RANEPA). International conference session "Public Administration and Development of Russia: Civilizational Challenges and National Interests"; section "System of training personnel for organizations of culture, science and education." Presentation: "The culture of digital art in the space and time of the city."

13. 01 March 2023; Children's Art School No. 3, Tambov. IV All-Russian scientific-practical conference "Modern children's school of arts: theory, methodology, practice, prospects." Presentation: "Multimedia and game-based technologies in the practice of teaching the discipline 'music literature (foreign and domestic)'."

14. 21 April 2022; Russian Academy of Music named after the Gnesins. VIII International Scientific Conference "Philosophy and Art." Presentation: "The philosophy of partnership between educational, cultural and arts institutions in the

creative space of a modern city (on the example of the festival-competition of musical art 'The Magic power of music').

15. 30 April 2021; A.Ya. Vaganova Academy of Russian Ballet. International scientific-practical conference The Architectonics of contemporary art in media discourse: space, technologies, agents. Presentation: GLITCH ART: digital possibilities of artistic expression.

16. 19 May 2020; Russian Presidential Academy of National Economy and Public Administration (RANEPA). International Conference Session Public Administration and Development of Russia: Global threats and structural changes; section Cultural policy in the discourses of power and civil society. Presentation: Musical culture and performance skills of students: digital formats of interaction.

17. 18 December 2018; Moscow, Civic Chamber of the Russian Federation: Interregional Conference of the IV Cultural Forum of Russian Regions Priority Projects: Strategic Lines for Cultural Development in the Constituent Entities of the Russian Federation. Thematic block Digitalization of the Cultural Sphere: Tasks and Expected Results.

18. 22 September 2017; Moscow, Civic Chamber of the Russian Federation. III Cultural Forum of Russian Regions: Education and Culture: Potential for Interaction and Resources of NGOs in the Socio-Cultural Development of Russian Regions (federal block). Presentation: Modern Professional Music Education: Traditions and Innovations.

The conceptual ideas of the work formed the basis for chapters in two collective monographs. In accordance with the dissertation topic, 14 scientific works have been published (including 3 articles in journals recommended by the Higher Attestation Commission (VAK) of Russia), with a total volume of 5.71 author's sheets.

In accordance with the dissertation research topic, 17 scientific works have been published with a total volume of 6,68 printer's sheets, including:

4 articles in peer-reviewed journals from the list recommended by the Higher Attestation Commission of the Ministry of Education and Science of Russia:

1. Nagornaya, L.N. Educational potential of interactive multimedia games in music education: studying the works of m.i. glinka's predecessors / L.N.Nagornaya // Sovremennaya nauka: aktualnye problemy teorii i praktiki. Seriya: Poznanie [Contemporary science: current problems of theory and practice. Series: Cognition]. – 2025. – No. 09. – pp. 25-30.

2. Nagornaya, L.N. Communicative potential of digital art: cultural and historical paradigms and practices / L.N. Nagornaya // Vestnik Moskovskogo Gosudarstvennogo Universiteta Kultury i Iskusstv [Bulletin of the Moscow State University of Culture and Arts]. – 2024. – No. 2(118). – pp. 100-107.

3. Nagornaya, L.N. Glitch art: origins and value meanings / L.N. Nagornaya // Art education and science. – 2021. – No. 4(29). – pp. 159-166.

4. Nagornaya, L.N. Scientific advances and artificial intelligence in the world of musical art / L.N. Nagornaya // Culture and Education. – 2020. – No. 4(39). – pp. 32-43.

Chapters in collective monographs:

1. Nagornaya, L.N. Digital technologies in microtonal music: a modified piano / L. N. Nagornaya // P.A. Serebryakov Volgograd State Conservatory: from the origins to the present day: a collective monograph. – Volgograd: IP Nikulina M.G., 2024. – pp. 83-88.

2. Nagornaya, L.N. Glitch art: digital possibilities of artistic expression / L.N. Nagornaya // The architectonics of contemporary art in the media mode: space, technologies, agents: a collective monograph dedicated to the problems of contemporary art in the media mode / E.E. Drobysheva, S.V. Lavrova, D.S. Artamonov [et al.]; A.Ya. Vaganova Academy of Russian Ballet. – Saint Petersburg: A.Ya. Vaganova Academy of Russian Ballet, 2021. – pp. 112-118.

Other publications in scientific journals and conference proceedings:

1. Nagornaya, L. N. Transdisciplinarity in contemporary Digital Art: from trend to new cultural paradigm / L.N. Nagornaya // Culturology in the Space of Humanitarian Knowledge: Abstract Collection, Saint Petersburg, October 16–17, 2025. – Saint Petersburg: Saint Petersburg State University, 2025. – pp. 326-334.

2. Nagornaya, L. N. The collective feat of the Soviet people in digital memory: virtual reconstructions of the battle of Stalingrad / L.N. Nagornaya // Cultural heritage of the North Caucasus as a resource for Interethnic harmony: program and abstracts of the XI International Scientific forum, Kabardinka, Gelendzhik, September 11-14, 2025. – Krasnodar: D.S. Likhachev Russian Research Institute for Cultural and Natural Heritage, Southern Branch, 2025. – pp. 173-174.

3. Nagornaya, L. N. Digital media as a factor of transformations in the musical avant-garde of the early 21st Century / L.N. Nagornaya // A Word About Music. – 2025. – No. 1(16). – pp. 21-27.

4. Nagornaya, L. N. Multimedia technologies as an innovative component of modern professional music education / L.N. Nagornaya // Music. Education. Personality: Collection of materials of the International Conference, Yakutsk, December 05, 2024. – Kirov: Interregional Center for Innovative Technologies in Education, 2024. – pp. 143-147.

5. Nagornaya, L.N. Electronic Educational Courses «The Humanities in the Art of Winning»: Conceptualization and Usage Technologies / L.N. Nagornaya // Public administration and development of Russia: civilizational challenges and national interests: collection of articles and materials of the Conference session of the Institute of Public Administration and Civil Service (IPACS), RANEPA, Moscow, May 15-20, 2023. – Moscow: «Nauchny Konsultant» LLC, 2024. – pp. 303-309.

6. Nagornaya, L.N., Shlykova, O.V. The Culture of Digital Art in the Space and Time of the City / L.N. Nagornaya, O.V. Shlykova // Public administration and development of Russia: civilizational challenges and national interests:

collection of articles and materials of the Conference session of the Institute of Public Administration and Civil Service (IPACS), RANEPA, Moscow, May 15-20, 2023. – Moscow: «Nauchny Konsultant» LLC, 2024. – pp. 239-243.

7. Nagornaya, L.N., Shlykova, O.V. Digital art: simulation or construction of a new socio-cultural environment / L.N. Nagornaya, O.V. Shlykova // Philosophy and Art: Materials of the VII International Scientific Conference, Russian Academy of Music named after the Gnesins, April 22, 2021. – Moscow: Russian Academy of Music named after the Gnesins, 2023. – pp. 97-103.

8. Nagornaya, L.N. Multimedia and game-based educational technologies in the practice of teaching the discipline «Music Literature» (foreign and domestic) / L.N. Nagornaya // Modern Children's School of Arts: Theory, Methodology, Practice, Prospects: Abstracts of the IV All-Russian Scientific-Practical Conference / Culture Committee of the Tambov City Administration; TOGBUK «Information and Analytical Center for Culture and Tourism of the Tambov Region»; MBU DO «Children's Art School No. 3». – Tambov: R.V.Pershin Publishing House, 2023. – pp. 106-113.

9. Nagornaya, L.N. Innovations and traditions: interface lines and their specificity in the educational space of institutions of culture and art in modern russia / L.N. Nagornaya // «Dialogues on Culture and Art»: materials of the IX All-Russian Scientific and Practical Conference with international participation (Perm, October 17–19, 2019). In 2 parts: part 2 / ed.-in-charge E.V. Batalina-Korneva; ed. board: A.A. Lisenkova, M.M. Chudinova, N.V. Zlobina; Perm State Institute of Culture. – Perm, 2020. – pp. 230-234.

10. Nagornaya, L.N. Implementation of Information and communication technologies as a development vector for an innovative educational space / L.N. Nagornaya // Science and Education: New Time. – 2018. – No. 6(29). – pp. 810-816.

11. Nagornaya, L.N. Intellectual property management of educational organizations in innovative educational environment / L.N. Nagornaya // Science and education: New time. – 2019. – No. 1(30). – pp. 651-664.

The research findings were tested in the process of teaching the academic discipline Music literature (foreign and domestic) at the Moscow Military Music College behalf of Lieutenant General V.M. Khalilov of the Ministry of Defense of the Russian Federation. The main provisions of the dissertation were applied during the postgraduate teaching practice within seminar sessions for full-time students in the field of study 42.03.02 Journalism, Producing and Cultural Policy, degree program B1.O.03 Culturology, based at the UNESCO Chair of the Institute of Public Administration and Civil Service, Russian Presidential Academy of National Economy and Public Administration (RANEPA).

The structure of the scientific qualification work is determined by the purpose and objectives of the study and consists of an introduction, three chapters, a conclusion, a list of references, and appendices.

Structure of the Scientific Qualification Work is determined by the goal and tasks of the research and consists of an introduction, 9 paragraphs combined into three chapters, a conclusion, a list of sources and literature, and appendices. The first chapter examines ontological and methodological aspects of digital art, stages of formation and development of the phenomenon, its transdisciplinary synthesis, and specifics as an object of cultural studies research.

The second chapter summarizes cultural forms and practices of digital art based on foreign and domestic experience, reveals the dialectics of the global and national in digital art, demonstrating the process of glocalization of culture. It is shown how, while balancing between the risks of simulation, commodification, and technological dependence, digital art simultaneously generates new forms of artistic communication, collective creativity, and actualization of cultural traditions.

The third chapter conceptualizes socio-cultural, legal, and educational aspects of the evolution of digital creativity in the context of the digital turn in culture, providing a comprehensive forecast of the development of digital art, where

technological innovations are considered in an inseparable connection with anthropological, ethical, axiological, and institutional challenges of modernity.