

MINISTRY OF EDUCATION OF THE REPUBLIC OF BELARUS
BELARUSIAN STATE UNIVERSITY
FACULTY OF PHILOSOPHY AND SOCIAL SCIENCES
Department of Social Communication

LI Feifei

**TRANSFORMATION OF COMMUNICATIVE PRACTICES IN THE
CONDITIONS OF DIGITALIZATION OF CULTURE**

Master's thesis
ANNOTATION

Speciality 7-06-0321-02 Communications

Academic supervisor:
Ilya N. Kolyadko
Doctor of Science in Philosophy,
Associate Professor

Minsk, 2025

ANNOTATION

Keywords: metaverse, platform, big data, immersive communication, filter bubble, technological power, cultural sovereignty, algorithmic transparency

Relevance of the study : Given the profound impact of the global digital cultural transformation on communication infrastructure, cognitive models, and power dynamics, this Master's thesis focuses on the core contradiction between technological power and cultural sovereignty. The thesis systematically analyzes the technological foundations and mechanisms of ideological contestation, and innovatively proposes a "Techno-Cultural Symbiotic Governance Model." This research addresses the challenges posed by digitization to cultural heritage from an interdisciplinary perspective integrating Communication Studies and Philosophy, aligning closely with the research direction of the Department of Social Communication within the School of Philosophy and Social Sciences. It provides crucial theoretical tools and practical pathways for sustainable digital cultural governance, ensuring the safeguarding of humanistic values amidst technological advancement.

The object of the research: The transformation of communicative practices driven by cultural digitalization.

The subject of the research : The study focuses on how communication practices transform during cultural digitization, particularly examining how media technologies reshape social cognition, challenge traditional cultural authority, and redefine meaning production and discourse.

The purpose of the research: This master's thesis investigates the profound transformation of communicative practices precipitated by the global digitalization of culture. It aims to uncover how technological mediation fundamentally reshapes the infrastructure, paradigms, and power dynamics of cultural production, dissemination, and reception. The core purpose is to diagnose the resulting ideological contestation mechanisms and propose a viable governance framework capable of reconciling technological power with cultural sovereignty, ensuring cultural continuity and humanistic values within the digital civilization era.

Objectives of the Study:

The research pursues three progressive objectives:

1. Systematically Analyze Foundational Shifts: To dissect how the evolution of media technology reshapes cultural communication infrastructure, and to reveal the cognitive revolution triggered by algorithmic recommendations and immersive technologies, along with their societal effects.

2. Deconstruct Ideological Contestation Mechanisms: To deeply examine the mechanisms of ideological struggle within the digital communication sphere, focusing on:

- Cognitive polarization caused by "filter bubbles" and information cocoons.

- The destabilizing impact of "meme warfare" on traditional cultural symbols and value systems.
 - The double-edged effect of blockchain technology on collective memory preservation and cultural identity formation.
3. Innovate and Validate a Governance Model: To construct and empirically test the original "Techno-Cultural Symbiosis Model" (TCSM) as a pathway for coordinating the conflict between technological efficiency logic and demands for cultural diversity, protecting humanity's spiritual coordinates.

Methods of Research: This paper adopts a multidimensional research approach, including literature analysis, in-depth case studies, comparative analysis, interdisciplinary research methods, and philosophical speculation.

Key innovations include:

1. The paper presents the "Techno-Cultural Symbiosis Model" (TCSM). This model bridges the gap between "instrumental rationality" and "value rationality," embedding ethical principles into algorithmic architecture.
2. It explores the core of cultural digital transformation. Characterized by the "genetic recombination of cognitive paradigms" and the "subversion of power relations," it explains, from a philosophical perspective, how digital technology reshapes human cognition and societal power structures.
3. Innovative solutions are proposed for digital cultural communication issues, such as the "Cultural Technology Observatory," along with innovative suggestions at the international cooperation level. These provide clear actionable guidelines and toolkits for global digital cultural governance.

Provisions Submitted for Defense:

1. Cultural digitalization drives a dual structural transformation. The thesis shows cultural digitalization causes two major changes. First, communication technology infrastructure evolves from traditional linear media to platform media, and then to immersive environments like the metaverse. Second, the model of cultural content production, dissemination, and consumption shifts from "creator-centric" to "data-driven" due to big data and algorithms. These changes reshape the foundation of digital communication practices.
2. Big data and algorithmic mechanisms lead to a significant transfer of power. The research reveals big data analytics and algorithms are the core of new technological power. Digital platforms gain structural power by controlling data flows and the attention economy. They replace traditional gatekeepers as content distributors, causing a power shift from states and cultural authorities to platform corporations. Algorithmic logic often marginalizes certain cultures and challenges cultural sovereignty.
3. "Filter bubbles" and "meme warfare" jointly exacerbate societal fragmentation. The thesis identifies two mechanisms in digital communication that

contribute to social division. "Filter bubbles" isolate individuals in homogeneous information environments, leading to cognitive fragmentation and polarization. "Meme warfare" destabilizes traditional cultural symbols through rapid replication and mutation. These forces work together to fracture shared meaning frameworks and deepen societal rifts.

4. Blockchain technology presents a double-edged sword for cultural heritage and collective memory. The research examines blockchain's impact on cultural heritage and memory. Blockchain offers opportunities like secure storage and authentication of cultural assets. But it also poses challenges such as solidifying specific narratives and exacerbating cultural identity fragmentation. Issues of technological access barriers and new power structures are also concerns.

5. The Techno-Cultural Symbiosis Model (TCSM) provides an innovative governance framework. To reconcile the conflict between technological power and cultural sovereignty, the thesis proposes the TCSM. This model emphasizes the dynamic mutual shaping of technology and culture. Its core innovations include value-prefiguration, resilient feedback loops, distributed authority construction, and human-centric technological transformation. The model has been successfully applied in the Dunhuang-Metaverse project.

Recommendations on the usage

1. Global Digital Governance: The research offers a framework for balancing technological innovation with cultural values, aiding in the creation of international digital policies that respect cultural diversity and ethical principles.

2. Cultural Heritage Revitalization: It provides a model for using advanced technologies like blockchain and VR/AR to preserve and promote cultural heritage, making it more engaging and relevant to contemporary audiences.

3. Algorithm Ethics Assessment: The study informs the development of ethics assessment tools for algorithms, ensuring they are designed to respect cultural values and minimize ethical risks.

4. Media Literacy Education Platform Policy Optimization: It guides the creation of educational programs that enhance media literacy and critical thinking, helping individuals navigate the digital landscape more effectively and responsibly.

Structure and scope of the master's thesis: The thesis structure follows the logical framework of research on the transformation of communication practices in the context of cultural digitization, focusing on the core themes of technological foundations, ideological struggles, and governance pathways. The thesis includes an introduction, three main chapters, a conclusion, and a list of references. The total length of the thesis is 65 pages, of which 61 pages are main text and 4 pages are a list of references (61 titles).