

Research on the Active Communication and Innovative Development of Intangible Cultural Heritage in Henbei Province in the New Media Era

Jiaxing Cao, Jiayue Pang, Ye Tang

English Department, North China Electric Power University, Baoding 071000, China

Abstract

In the context of new media technology deeply reconstructing the cultural communication ecosystem, intangible cultural heritage (ICH) face historical opportunities for living inheritance and innovative development. New media technology, with its trans-spatiotemporal nature, multi-modal interaction, and data-driven advantages, constructs an empowerment logic of "dissemination empowerment - experience enhancement - community activation - user engagement - value closure," providing a systematic pathway to address the spatiotemporal limitations, generational disconnection, and value fragmentation faced by ICH inheritance. As a province rich in ICH resources, Hebei has achieved phased results in ICH protection and the construction of a dissemination matrix, relying on policy support and digital practices. However, it still faces structural challenges such as singular communication entities, content homogenization, technology-culture disjuncture, and inadequate commercial transformation. Based on the characteristics of new media technology and its intrinsic connection to the living inheritance of ICH, this paper systematically analyzes the practical achievements and current challenges of ICH dissemination in Hebei. It proposes multidimensional collaborative pathways encompassing synergistic network building, digital twin preservation, interdisciplinary talent cultivation, and cross-generational communication innovation. The research aims to facilitate the transformation from "static conservation" to "dynamic innovation" for ICH, providing theoretical foundations and practical paradigms for regional cultural revitalization and sustainable ICH development.

Keywords

Intangible cultural heritage; New media; Current challenges; Living inheritance; Innovative development

1. The Intrinsic Connection Between New Media and ICH Transmission

New media demonstrates a progressive logic of "dissemination empowerment - experience enhancement - community activation - user engagement - value closure," across five dimensions in promoting ICH transmission and development. This framework reveals the inherent alignment between new media characteristics and ICH evolution, addressing the urgent needs of living heritage transmission while providing systematic solutions for its innovative development.

1.1. Enhancing Spatiotemporal Efficiency of ICH Communication

The trans-spatiotemporal and real-time nature of new media fundamentally elevates the spatiotemporal efficiency of ICH communication. Traditional ICH transmission relies on geographically constrained performances and oral instruction—linear models whose reach diminishes due to physical and temporal limitations. In contrast, new media leverages internet infrastructure and digital technologies to achieve extensive dissemination through cloud

storage, Content Delivery Networks, and multi-device adaptability. Platforms like short videos and live streaming enable ICH practitioners to demonstrate craftsmanship in real-time, drastically compressing communication cycles. Furthermore, these characteristics foster "event-driven" communication strategies, exemplified by initiatives like live-streamed "ICH New Year's Eve" campaigns during festive peaks, harnessing instant traffic surges for exponential propagation impact.

1.2. Enabling Immersive Experiences in ICH Communication

Through multimodal systems integrating text, audio, video, Virtual Reality, and Augmented Reality, new media transforms ICH presentation from static displays to dynamic interactions. First, documentaries and short videos visualize microscopic craft processes as dynamic imagery, lowering cognitive barriers while amplifying cultural resonance. Second, ICH intellectual property models establish distinctive symbolic systems and narrative frameworks, serving as content foundations for multidimensional expression while reinforcing coherent cultural cognition. VR technology reconstructs ICH's original cultural contexts, whereas AR overlays digital elements onto physical environments to enhance perceptual authenticity. These immersive scenarios enable audiences to intuitively appreciate ICH's artistic essence, fostering emotional engagement and cultural identity through sensory-rich storytelling.

1.3. Constructing Community Ecosystems for ICH Communication

New media inherently intertwines information dissemination with social interactions. Leveraging the nested diffusion mechanisms of social networks, user interactions and sharing generate chain reactions that dismantle community barriers in ICH transmission. The interplay between strong-tie networks (e.g., friend circles, fan communities) and weak-tie networks (e.g., algorithmic recommendations, hashtag trends) forms a hybrid communication matrix, enabling ICH content to permeate from core communities to peripheral audiences. Furthermore, community co-creation shifts ICH transmission from unidirectional dissemination to multi-agent collaborative production through decentralized participation models. New media platforms empower non-professional users to engage in ICH reinterpretation, thereby catalyzing its creative transformation and innovative development.

1.4. Achieving Customized Outreach in ICH Communication

Data-driven communication efficacy relies on real-time feedback and dynamic iteration mechanisms. By monitoring user behavior metrics (e.g., click heatmaps, bounce rates), platforms rapidly identify content deficiencies and optimize strategies. Machine learning models predict user interest decay cycles, proactively delivering targeted content (e.g., ICH festival campaigns, limited-time offers) to sustain engagement. This dynamic optimization evolves ICH communication from static broadcasting to intelligent "sense-and-respond" loops. Additionally, platforms employ tagged ICH resources and historical user data to construct multidimensional personas.

1.5. Promoting the Sustainable Development of ICH

The digital characteristics of new media provide permanent preservation solutions for ICH. Through multimodal data collection and structured storage technologies, the craftsmanship processes, cultural contexts, and oral histories of ICH are transformed into permanently preserved digital assets. The core value of digitization lies in transcending the limitations of physical carriers, achieving perpetual preservation through virtualization technologies, and ensuring intergenerational and cross-regional transmission.

Furthermore, the commercial operations of new media activate the contemporary vitality of ICH through market logic. By establishing omni-channel consumption scenarios—such as live-streaming e-commerce, virtual trade fairs, and subscription-based membership services—ICH

achieves direct value realization. This commercialization path not only addresses funding challenges in ICH protection but also drives content innovation through market demands, forming a virtuous cycle of "preservation-development-reinvestment."

2. Overview and Challenges of ICH Transmission and Development in Hebei Province Under New Media Diversification

In recent years, Hebei Province has achieved significant progress in ICH protection, transitioning from "preservation through enhancement" to living heritage transmission. Through policies such as *14th Five-Year Plan for Intangible Cultural Heritage Protection in Hebei Province* and *ICH Workshop Accreditation and Management Measures in Hebei Province*, the province has established a multi-tiered policy support system in ICH preservation. Legal frameworks and safeguard conditions have been strengthened, promoting deep integration of ICH protection with national strategies like rural revitalization and cultural-tourism synergy. Concurrently, Hebei has intensified efforts to identify and support ICH practitioners, significantly enhancing preservation capabilities through training programs and the establishment of transmission centers.

Regarding digital preservation, Hebei has actively advanced digital collection and storage of ICH resources. By constructing ICH databases and developing digital display platforms, the province ensures long-term conservation and broad dissemination of these resources. Additionally, Hebei organizes cultural exchange activities like ICH exhibitions and performances while building a multi-dimensional communication network combining "government media + market-oriented platforms." This network spans short videos, live streaming, and social media, substantially improving communication efficiency and content diversity. Innovative transmission methods and heightened public awareness have enabled numerous outstanding ICH projects to enter schools and communities.

Despite these achievements in living transmission and innovative development, Hebei's ICH protection and transmission systems remain incomplete under current new media conditions, indicating room for improvement.

2.1. Monolithic Communication Entities and Insufficient Social Participation

Hebei's ICH communication demonstrates marked singularity in stakeholders, predominantly led by government cultural departments and ICH practitioners, with limited engagement from social forces, corporate entities, and youth groups, forming a top-down unidirectional transmission model. While official agencies have established communication platforms through government-affiliated new media matrices, their content disproportionately features festival announcements or policy document reposts, lacking innovation incentives. Furthermore, ICH practitioners face constrained communication channels, primarily relying on simplistic text-image formats that structurally disconnect from youth preferences. Additionally, cultural enterprises, universities, and social organizations remain underutilized in ICH dissemination, with insufficient cross-sector collaboration mechanisms restricting coverage and hindering the development of a "whole-society participation" ecosystem.

2.2. Homogenized Content and Superficial Cultural Representation

Current ICH communication via new media in Hebei predominantly focuses on craft demonstrations and folk festival documentation, exhibiting superficial and symbolic tendencies that inadequately explore cultural depth. Content homogenization prevails across visualized scenarios like technical performances and seasonal customs. Some materials excessively adapt traditions for algorithmic traction through entertainment-oriented modifications, neglecting systematic explanations of production techniques, historical origins, and regional cultural connections. This approach undermines ICH's authenticity and gravitas, reducing audience

engagement to visual spectacle rather than fostering profound cultural identity. While such strategies temporarily boost visibility, they risk simplifying ICH's cultural value into flattened symbols and diluting its spiritual essence, ultimately exacerbating cultural memory fragmentation in the long term.

2.3. Professional Talent Shortage and Inadequate Media Literacy

The current ICH communication field exhibits a "dual disconnection" phenomenon, characterized by a scarcity of technology-culture interdisciplinary professionals. On one hand, inheritors demonstrate weak digital literacy, lacking comprehensive understanding and practical experience in new media platform operations, content creation techniques, and video production skills, rendering them passive in digital dissemination. On the other hand, while existing new media professionals possess strong technical competencies, their insufficient grasp of ICH's cultural essence leads to excessive emphasis on formal innovation and entertainment value, deviating from ICH's authentic representation. Furthermore, the higher education system lacks interdisciplinary "ICH + new media" curricula, coupled with immature university-industry collaboration mechanisms, creating disjuncture between talent cultivation and industry needs that constrains sustainable living transmission.

2.4. Immature Commercial Models and Inadequate Rights Protection

Hebei's ICH industrialization primarily relies on offline sales and tourism derivatives, with underdeveloped new media commercialization models. Although emerging formats like short video tipping and live-stream commerce have been introduced, the absence of systematic operational strategies manifests as disconnection between traffic acquisition and commercial conversion. Most ICH projects fail to establish complete brand systems, remaining at primary processing stages without deep exploration of cultural added value, thereby weakening market competitiveness. Moreover, deficient intellectual property protection constitutes a critical bottleneck. Digitized ICH elements face risks of unauthorized use, distortion, and misuse, with inheritors' rights of attribution and benefit distribution inadequately safeguarded. In derivative development, mechanized replication of core craftsmanship dilutes cultural uniqueness, while existing IP regimes prove insufficient for protecting such "tacit knowledge." This institutional deficiency not only discourages inheritors' innovation incentives but also impedes efficient market allocation of ICH resources.

3. Pathways for ICH Transmission and Innovative Development in Hebei Province Under New Media Diversification

Amidst the profound reconstruction of cultural communication ecology by new media technologies, Hebei's ICH faces systemic challenges in living transmission and innovative development, including singular stakeholders, homogenized content, talent disjuncture, and commercial inefficiency. Guided by new media's empowerment logic of "dissemination empowerment - experience enhancement - community activation - user engagement - value closure," a multi-dimensional collaborative innovation system must be constructed: breaking communication barriers through multi-stakeholder collaboration, revitalizing content value via cultural genome decoding, upgrading talent through technological empowerment, activating market dynamics with commercial closed-loops, strengthening preservation via digital twins, and expanding audience boundaries through cross-generational innovation. These six measures form a virtuous cycle of "stakeholder activation - content renewal - technological support - market reciprocation," providing systematic solutions to transition ICH from cultural preservation to innovative development.

3.1. Establishing a "Government-Enterprise-Society-University" Collaborative Network to Overcome Singular Stakeholder Limitations

To address the singular stakeholder issue in ICH communication, constructing a multidimensional network led by governments, supported by enterprises, coordinated by social organizations, and empowered by universities is essential.

3.1.1. Government-Led Planning and Resource Integration

Governments should exercise leadership by establishing cross-departmental coordination agencies that integrate policy resources across cultural tourism, education, science and technology sectors. This requires clarifying departmental responsibilities in ICH communication, breaking administrative barriers, and forming collaborative synergies. Concurrently, governments should increase funding through dedicated support funds for digital infrastructure, communication platforms, and talent development.

3.1.2. Enterprise-Driven Technological Support and Market Operations

Enterprises contribute technological and market advantages. Establishing an ICH digital copyright trading center with improved legal frameworks and transaction protocols is critical. Leveraging big data, AI, and VR technologies, enterprises should develop innovative solutions like digital display platforms and interactive experiences to enhance communication efficacy and user engagement.

3.1.3. Social Organizations as Bridging Agents and Resource Sharers

Social organizations facilitate communication among governments, enterprises, universities, and the public. Building blockchain-powered ICH digital resource sharing platforms can boost participation. Organizing exhibitions, cultural festivals, and public lectures enhances public awareness, while volunteer programs and training initiatives cultivate skilled ICH advocates.

3.1.4. University-Led Research Innovation and Talent Cultivation

Universities should integrate ICH communication into interdisciplinary research, advancing studies on digital preservation and creative communication strategies. Establishing ICH-related academic programs and industry-academia-research collaboration mechanisms strengthens practical competencies. Curriculum development in ICH protection and cultural creativity, coupled with joint projects with enterprises, enhances students' innovative capacities.

3.2. Establishing a Digital Protection System to Strengthen Technological Safeguarding Capabilities

3.2.1. Comprehensive Data Collection and Dynamic Archiving

Utilize advanced technologies such as multispectral scanning and IoT sensors to conduct holistic data acquisition for endangered ICH projects, encompassing material carriers, production techniques, performance forms, and cultural contexts. Establish dynamic digital archives through real-time monitoring of ICH project status and changes, enabling timely issue identification and protective interventions.

3.2.2. Transmission Risk Early-Warning and Intervention Mechanisms

Develop machine learning-based risk prediction models to analyze indicators including inheritors' age structures, craft transmission density, and social engagement levels. When high attenuation risks are detected, activate digital rescue protocols immediately—prioritizing inheritor protection, conducting skill transmission training, and intensifying promotional efforts—to ensure ICH continuity.

3.2.3. Digital Twin Laboratory Development and Application

Construct ICH digital twin laboratories to transform traditional craftsmanship into editable digital models (e.g., Building Information Modeling). Through digital twin simulations, provide

cultural element integration solutions for urban design and creative industries. Concurrently, utilize these laboratories for preservation research and innovative methodology exploration, enhancing scientific rigor and effectiveness in ICH safeguarding.

4. Conclusion

This study systematically investigates the empowerment logic and implementation pathways of new media technologies in facilitating the living transmission and innovative development of Intangible Cultural Heritage (ICH) in Hebei Province. Through theoretical framework construction and empirical analysis, key findings emerge: New media reshapes ICH transmission through the progressive logic of "communication empowerment - experience enhancement - community activation - user engagement - value loop formation," reconstructing temporal-spatial efficiency, cultural perception, and value chains. While Hebei has established policy frameworks and digital infrastructure, persistent challenges include content homogenization and talent disjuncture. Corresponding systemic solutions—"government-enterprise-society-university collaborative networks," "digital twin preservation systems," "dual-competency talent cultivation mechanisms," and "cross-generational communication innovations"—are proposed to transition ICH from cultural preservation to innovative development.

The results demonstrate that living ICH transmission requires technology-driven, culture-anchored, and market-linked approaches to achieve dynamic equilibrium between preservation and innovation logics. Future research should address digital ethics in ICH preservation, long-term efficacy of cross-generational communication, and cultural genome decoding to refine theoretical and practical frameworks. Hebei's innovative pathways not only provide regional cultural revitalization models but also contribute Chinese wisdom to global ICH safeguarding practices.

Founding

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