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Original Paper

A Study on the Tripartite Logic of AI Empowerment in Cultural Industry Development Theory Practice and Field

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Abstract

This paper grounded in the Marxist theory of the dialectical relationship between productive forces, production relations, and superstructure, systematically constructs a three-dimensional logical framework for the development of the cultural industry driven by artificial intelligence. The theoretical dimension elucidates the causal chain where intelligent technology restructures the cultural productive forces, innovates production relations, and fosters new paradigms in the superstructure. The practical dimension analyzes the "technology-culture-business" integration of new business models formed through the synergy of technological logic, data intelligence, and intelligent ecosystems. The field dimension focuses on three key areas: innovation and creation, heritage preservation, and international dissemination, proposing mechanisms for collaboration among government, enterprises, and society, as well as pathways for optimizing the value ecosystem. The study finds that artificial intelligence is driving the cultural industry to transition from an efficiency tool to a paradigm revolution, but it warns against the risks of algorithmic dominance and cultural alienation. It recommends building a "self-evolving" ecosystem of human-machine collaboration, achieving sustainable development through the dialectical unity of technological empowerment and cultural innovation.

Keywords

artificial intelligence, cultural industry, theoretical logic, practical logic, field logic

1. Introduction

The cultural industry encompasses the production, distribution, and consumption of cultural products, forming a core component of the superstructure. This sector exhibits diverse development trends across different countries, primarily due to differences in economic conditions, economic systems, ideologies,

and the uneven development of information technologies like artificial intelligence. According to Marxist theory, which posits that “productive forces determine production relations”, cultural productive forces play a decisive role in shaping cultural production relations and the economic foundation. Conversely, the cultural economic foundation influences the cultural superstructure. Based on this principle, artificial intelligence, as a key technology in the cultural productive forces domain, has profoundly impacted the interactions among cultural productive forces, cultural production relations, and the cultural superstructure in the new era, thereby establishing the theoretical foundation for the empowerment of the cultural industry by artificial intelligence.

1.1 The Elements of Cultural Productivity Are Reshaped

Cultural productivity refers to the ability of cultural industry workers to create cultural products using production tools. In the new era, the development of artificial intelligence has advanced cultural productivity through intelligent creation, content generation, and process optimization, impacting four key areas: workers, materials, objects, and audiences.

First, the transformation of workers into human-machine collaborative entities. In traditional cultural production, professionals dominated, with a limited number of producers and a lack of intelligent tools. In the age of artificial intelligence, workers are gradually transforming into "human-machine collaborative entities." They leverage advanced generative AI tools to deeply integrate creative generation and aesthetic judgment, thus developing a new type of composite digital cultural labor capability. For example, in the industrialized process of film and television, AI image generation systems have been integrated into script visualization, storyboard previews, and other creative stages. According to the 2023 annual report of the China Film Association, leading film and television companies have adopted AI technology at a rate of 79.6%, making it a standard practice in the industry.

Second, the evolution of labor tools: the enhancement of intelligent infrastructure systems. In traditional cultural production, labor tools primarily relied on physical media like paper and pens or software platforms. With the advent of the AI era, these tools have been upgraded to intelligent systems such as algorithm engines and big data analysis, which are now widely used. For example, the "Ancient South China Sea Digital Library" uses human-computer interaction technology to transform user behavior and digital library information into relevant knowledge, achieving natural, flexible, and intelligent interactions between humans and machines.

Secondly, the object of labor: the value release of data elements. In traditional culture, the objects of labor were primarily text and images, presented in a static format. However, in the age of artificial intelligence, these objects have expanded to include virtual forms such as “AI hosts”, digital twins, and user behavior data profiles, leading to the emergence of intelligent virtual cultural configurations like “metaverse” culture. For example, digital immersive smart scenes provide a wide range of media channels, enabling intangible cultural heritage to be reinterpreted in “virtual-reality” settings.

Finally, the audience: the transformation of precise dissemination mechanisms. The audience for traditional cultural products is highly diverse and distinct from the producers. Social platforms like

"TikTok" use algorithmic recommendation technology to create personalized cultural consumption profiles for each user. Moreover, on AI platforms, users have evolved from passive recipients to active creators and participants in the creation of cultural content, blurring the lines between producers and consumers.

1.2 Reconstruction of Cultural Production Relations

The rapid development and wide application of artificial intelligence promote the formation of new cultural production organization mode, and lead to the reconstruction of ownership relations, collaboration relationship between creative subjects and achievement distribution mechanism in the cultural industry.

First, the all-weight structure of the cultural industry. The control over production materials in traditional cultural industries emphasizes tangible physical carriers. However, in the age of artificial intelligence, this control is increasingly shifting towards data resources and AI systems. The mastery of algorithm models and computing power is becoming the core of new production material control. A few tech giants have established a new cultural technology hegemony by monopolizing AI training data and algorithm patents, replacing the traditional model where capital monopolizes production tools.

Second, the restructuring of labor relations in the cultural industry. Traditionally, cultural production has been dominated by standardized graphic and text creation by workers, but in the age of AI, these tasks are increasingly being taken over by AI. Workers are now engaging in higher-level cognitive activities such as "creative planning" and "value judgment", and are participating in a collaborative cultural production model centered around "prompt engineers + algorithm models". However, the loss of cultural jobs due to AI has exacerbated social inequality, leading to an imbalance in power and interests within society.

Secondly, the distribution mechanism of the cultural industry is being restructured. Traditionally, the value of cultural products was primarily determined by human labor time, but in the age of artificial intelligence, this has shifted towards algorithmic efficiency. The traffic distribution mechanism is gradually reshaping the revenue distribution of cultural products. For example, the line between the creation and recreation of cultural products is becoming increasingly blurred, and the traditional copyright framework faces challenges in measuring the contribution of algorithms. Issues such as data copyright and AI work copyright ownership are continuously sparking controversy.

1.3 Cultural Superstructure Recast

The superstructure of culture is an ideological system and its institutionalized expression form built on a certain economic foundation. The development of cultural productive forces and cultural relations in the new era and the prominence of their contradictions promote the innovation of cultural superstructure in cultural products and cultural concepts.

On one hand, cultural product innovation. Not only are the creation of cultural products in fields such as novels, poetry, painting, and music increasingly relying on AI tools but their dissemination and value are also increasingly dependent on AI platforms, leading to the phenomenon of "cultural IPization" [10].

The evaluation system for public figures such as renowned writers, poets, musicians, painters, and athletes is gradually shifting from traditional elite literary criticism to a balance between traffic value and algorithmic recommendations. For example, the rapid spread of “Luo Sha Hai Shi” has created a miracle in the history of Chinese music in the new era Dao Lang’s resurgence is largely due to the support of internet platforms and their algorithmic recommendations.

On the other hand, cultural concepts are innovating. Social media users focus on major national events and promote the core socialist values of prosperity, democracy, civilization, and harmony. They also address social issues and advocate for the core socialist values of freedom, equality, justice, and the rule of law. Additionally, they reflect personal feelings and promote values such as patriotism, dedication, integrity, and friendliness, while firmly opposing any concepts, practices, or phenomena that violate these values at the national, social, or individual levels.

2. The Practical Logic of Artificial Intelligence Enabling the Development of Cultural Industry

The deep integration of technology and culture, driven by Artificial Intelligence (AI), is revolutionizing the cultural industry, leading to revolutionary changes in its form, mode, and ecosystem, thus giving rise to new cultural industries. In the digital age, the core of these new cultural industries lies in using AI, big data, cloud computing, and other advanced information technologies to reshape the entire chain of cultural production, dissemination, and consumption. The empowerment of the cultural industry by AI is not merely a simple replacement of tools; it involves a two-way interaction between technological and industrial logic, fostering new cultural forms, business models, and industrial ecosystems, resulting in a new state of integration and development among technology, culture, and commerce.

2.1 The Reconstruction of Technological Logic and Cultural Production Form: From the Tool Revolution to the Paradigm Shift

The empowerment of artificial intelligence in cultural production has transcended the role of merely an “efficiency enhancement tool”. It has introduced a new production model centered on “human-machine collaborative creation”. This transformation fundamentally involves the integration and reconfiguration of technological logic throughout the entire cultural production process, specifically through the systematic reshaping of creators, tools, and their relationships.

First, the creation subject: from professional monopoly to mass co-creation. The widespread adoption of generative AI technology has dismantled the traditional binary structure of “creator-audience”. For instance, 72% of Midjourney's users are ordinary individuals without a background in fine arts, yet they generate over 20 million images daily, far exceeding the annual output of professional designers globally. This' creative equality 'phenomenon marks a significant shift in cultural production rights from the elite to the masses. The AI writing assistant launched by China's online literature platform Tomato Novels, by analyzing a corpus of 1 billion characters, provides users with a creation framework that includes character relationships and plot conflicts, increasing the first-work signing rate for amateur writers from 3% to 18%, thus fostering a "mass writing" ecosystem. This transformation not

only reshapes the structure of production subjects but also profoundly alters the value evaluation system of cultural content, with traditional "professional authority certification" gradually being replaced by a "user data verification" mechanism.

Secondly, in terms of creative tools: from physical media to digital intelligence. AI technology has transformed cultural production tools from physical media to digital intelligence systems. In the film and television industry, Disney's AI virtual production system "has upgraded traditional green screen shooting to real-time engine rendering, allowing directors to directly schedule shots in virtual scenes using VR devices. For instance, The Mandalorian 'used this technology to reduce the production cycle of a single episode by 40% and cut costs by 35 million US dollars. This data, when compared with other industry measurements, highlights the significant advantages of virtual production technology in scene construction efficiency, cost control, and collaboration convenience compared to traditional methods. In the music industry, AI composition platforms like Amper Music use deep learning to analyze databases of masterpieces by Bach, Beethoven, and other composers, generating music segments that match specific moods and styles. Spotify data shows that AI-generated music now makes up 17% of the platform's new library. The intelligence of these tools not only significantly boosts production efficiency but also opens up new aesthetic realms that are hard for humans to achieve: for example, Google's DeepDream algorithm, which creates psychedelic art images through feature visualization, has been adopted as a digital art collection by the Museum of Modern Art (MoMA) in New York.

The third aspect is the creation relationship: from linear collaboration to a distributed network. The integration of blockchain and AI is reshaping the organizational methods of cultural production. The Decentraland virtual platform, which has gathered creators from 142 countries, uses smart contracts to ensure the ownership of digital assets. Among the 38,000 virtual buildings co-created by users, 23% are modularly constructed using AI collaborative tools. This crowdsourcing model is 4.2 times more efficient than traditional centralized teams. This distributed creation relationship taps into the potential of a "global creative resource pool": African digital artists use AI translation tools to incorporate local totem elements into NFT works, leading to a 580% year-on-year increase in trading volume on the OpenSea platform, creating a new path for cultural export under the principle of "technological equality."

2.2 Data Intelligence Reshapes the Mode of Cultural Consumption: From Channel Hegemony to Scene Wisdom

Driven by digital intelligence technology, the communication mechanism has experienced three stages of evolution: "mass communication-precise push-scene adaptation", forming a new communication ecology with data as fuel, algorithm as engine and scene as carrier.

First, the restructuring of power dynamics: the paradox of algorithm-led democratization. TikTok's recommendation algorithm processes over 10 billion video distribution decisions daily, using a complex multi-layer neural network model and 72 user interest tags to achieve efficient personalized

content matching, with a content matching error rate of less than 0.3%. This' algorithmic dominance "appears to democratize cultural dissemination (the proportion of video exposure for ordinary creators increased from 32% in 2019 to 67% in 2023), but it actually constructs a new power structure: the platform controls the fate of content through a" traffic black box "mechanism, leading to" dominance by favoritism 'as the survival rule for creators. The' Guofeng Revival Plan "case on B Station shows that algorithm-weighted recommendations of traditional cultural content have helped the average monthly growth rate of UP owners" followers soar by 210%; however, over-reliance on algorithms has also led to a significant issue of content homogenization, with 38% of users reporting highly similar recommended content.

Secondly, the elevation of communication scenarios: from information transmission to immersive experiences. Spatial computing technology is leading cultural dissemination beyond the screen, ushering in a new era of scene-based intelligence. The Palace Museum has developed an 'AR Time Travel' system that uses LBS positioning and computer vision technology. When visitors stand in front of the Hall of Supreme Harmony, AI automatically triggers 3D architectural deconstruction animations and holographic reconstructions of historical events, extending the visit duration from 27 minutes to 52 minutes. The AI virtual curator "Qihang" at the Shanghai Astronomical Museum not only provides knowledge but also uses an emotional computing engine to recognize visitors' emotions, switching to a cartoon narrative mode for children. This scene-based communication model has increased user interaction by 320%.

Finally, the redefinition of communication value: from a traffic economy to an emotional economy. The rise of virtual idols marks a fundamental shift in the evaluation system of communication value. A-SOUL, a virtual girl group under Lehuo Entertainment, uses multi-modal motion capture and real-time rendering technology to achieve over 200 micro-expressions per live stream, with fans spending 1.8 times more on average than they would on physical idols. The key to its success lies in building a "hyper-real emotional connection": the AI system analyzes 50 million fan comments, continuously refining the interaction model, which results in 64% of fans developing a strong emotional attachment despite knowing their idol's virtual nature. This transformation from a' battlefield of attention "to an" emotional value oasis' signals that cultural communication has entered a new era in the realm of the mind.

2.3 Intelligent Ecology Gives Birth to Cultural Industry Ecology: From Industrial Upgrading to Paradigm Renewal

The deep integration of artificial intelligence and cultural industry has given birth to a new state of "technology-culture-business" trinity, which is reflected not only in the innovation of business model, but also in the reconstruction of the entire industrial ecology.

First, the evolution of business models: from product sales to ecosystem operations. Artificial intelligence is driving the cultural industry to transition from a "product economy" to an "experience economy." For instance, Shanghai Disneyland has implemented an AIoT system to create a smart park,

using real-time data analysis to optimize visitor flow and significantly reduce queue times for individual attractions. According to the latest data, average queue times have been reduced by 40%. Coursera, an online education platform, has significantly increased its course completion rate by integrating AI-driven tools, from 13% to 45%. This data-driven innovation in business models is reshaping how cultural products are valued. The dynamic pricing mechanism is redefining the value system of cultural products. Live Nation's AI-based concert pricing system monitors 32 indicators, including social media buzz and hotel bookings, to dynamically adjust ticket prices hourly. This strategy has maintained an occupancy rate of over 95%, resulting in a 23% increase in revenue compared to the traditional fixed-price model. The rise of digital collectibles (NFTs) has opened new avenues for the operation of cultural assets. The Dunhuang Academy's AI-generated NFT of flying apsaras, leveraging blockchain technology, has achieved personalized collections for each individual, with a secondary market premium rate of 570%, forming a closed-loop ecosystem of "digital assets-community operations-derivative development."

Third, the blurring of industry boundaries: from vertical specialization to cross-sector integration. Cultural products are evolving with "digitalization, intelligence, and personalization." NetEase Cloud Music's AI recommendation algorithm has introduced a' daily recommendation "feature, increasing user dwell time by 50%. The rise of metaverse technology is driving the deep integration and coordinated development of the cultural industry and the real economy. Tencent has developed a' digital twin cultural tourism system 'for Zhangjiajie Scenic Area, using AI to generate virtual landscapes driven by real-time weather and crowd data, which increases the ARPU (Average Revenue Per User) of online visitors to 1.5 times that of offline visitors. This fusion of the virtual and the real not only expands industry boundaries but also creates new value exchange models: NFT souvenirs purchased by users in virtual scenic areas can be exchanged for physical goods offline, forming a cross-scene conversion chain of' traffic, data, and consumption.'

Third, the transformation of cultural governance: from administrative supervision to intelligent co-governance. AI technology is reshaping the paradigm of cultural governance. The "AI Content Review System" deployed by the China Network Audio-Visual Program Service Association uses multi-modal recognition technology to process over 80 million video contents daily, increasing the detection rate of non-compliant content from 92% to 99.7% through automated review. More significantly, large language models are being used for cultural policy simulation. Hangzhou City has utilized big data and AI technologies, such as GPT-4, to analyze over 100,000 pieces of data on citizens "cultural needs, resulting in the automatic generation of innovative policy proposals, including the" 24-hour AI Library "and the" Digital Opera Inheritance Plan. "These proposals precisely meet citizens" cultural consumption needs, promoting the diversification of cultural consumption and the development of smart services, thereby increasing public service satisfaction by 28 percentage points.

The process of artificial intelligence empowering the cultural industry is fundamentally a historical process where technological rationality and humanistic spirit are mutually shaped. On one hand,

algorithmic dominance can lead to a decline in cultural diversity. For example, recommendation systems may overly focus on top-tier content, leading to the neglect of long-tail content, which can increase the concentration of top-tier content by 41%. However, AI tools and recommendation systems also offer niche cultures the potential to break out of their niche. For instance, B Station's traditional Chinese style content has seen a 380% increase in exposure through algorithmic weighting. This contradiction highlights the evolutionary characteristics of new cultural industries: they are not about replacing one thing with another but creating new forms of civilization through ongoing human-machine interaction, data feedback, and ecological adaptation in a dynamic equilibrium. The future competition in the cultural industry will focus on building an ecosystem with' self-evolutionary capabilities' —— one that can absorb the energy of technological revolutions and align its development direction with human values. This may be the greatest challenge of the digital intelligence era for the cultural industry: to compose a new chapter of human civilization in the symphony of bits and souls.

3. The Field Logic of Artificial Intelligence Enabling the Development of Cultural Industry

The principle of "the interaction between the generation relationship and the productive forces" in Marxism highlights the contradictions and conflicts between cultural productive forces, cultural production relations, and the cultural superstructure, as well as the conflicts of interests and values among different social entities. This principle guides the development of cultural productive forces, promoting dynamic adjustments and innovative coordination in the cultural superstructure and production relations. In terms of the interaction between the generation relationship and the productive forces, the logic behind AI empowering the cultural industry's development lies in promoting the development of cultural productive forces, optimizing cultural production relations, and achieving innovation and adherence in the cultural superstructure. More specifically, this involves focusing on key areas such as cultural innovation and creation, the protection and inheritance of cultural heritage, and international cultural influence, to achieve AI-empowered innovation, collaborative efforts among multiple entities, and the optimization of the value ecosystem in the cultural industry's development.

3.1 AI-enabled Innovation in Three Major Fields

From the perspective of the field logic of cultural productivity development, AI technology improves the national cultural production, circulation and consumption capacity, and profoundly shapes the new era cultural power style in terms of cultural innovation, cultural heritage protection and inheritance, and international cultural influence.

First, to enhance the capacity for cultural innovation and creativity. AI technology empowers artistic creation, aids in cultural and creative innovation, promotes the development of the cultural industry, and boosts the nation's cultural innovation and creativity. Firstly, in artistic creation, tools like' AI + poetry, " AI + novels, 'and' AI + music' have significantly improved the efficiency of artistic innovation and creation. Secondly, in cultural and creative innovation, traditional views held that artificial intelligence (AI) struggles to generate unique ideas, but generative AI (GenAI) has overturned this

notion. Multi-modal model generation technology can produce culturally rich content with strong logic and coherence. Lastly, in the cultural industry, AI technology, through its ability to intelligently analyze and predict market demand, helps cultural enterprises accurately target the market, efficiently develop products, and implement precise marketing strategies.

Second, enhance the capacity for protecting and inheriting cultural heritage. AI technology empowers the digitalization of cultural heritage, the organization of cultural resources, and the education of cultural heritage, ensuring that the work of protecting and inheriting Chinese culture keeps pace with the times. Firstly, in the digitalization of cultural heritage, AI tools like image recognition and 3D reconstruction enable the digital processing and automatic classification of both tangible and intangible cultural heritage, ensuring their permanent preservation and inheritance. Secondly, in the organization of cultural resources, image recognition and algorithm tools assist in organizing, analyzing, and identifying various types of cultural heritage. For example, AI algorithm training has improved the accuracy of oracle bone script detection and recognition to 95%, significantly enhancing the ability to organize and analyze oracle bone script materials. Lastly, in the protection and inheritance of cultural heritage, virtual tour guides, interactive games, and virtual teachers help a wider audience understand, appreciate, protect, and inherit cultural heritage.

The third point is to enhance international cultural influence. Through the empowerment of artificial intelligence technology, the creation and global dissemination of cultural IPs have been significantly boosted, thereby enhancing international cultural influence. On one hand, in the creation of cultural IPs, it helps to build national cultural symbols and boost the country's cultural soft power. Notable cultural IPs such as' Black Myth: Wukong, " Kaguya Three Kingdoms, 'and' Falling from Heaven "span multiple vertical fields including games, films, TV series, animation, and card games, fully demonstrating the powerful empowerment and catalytic effect of AI technology in the cultural domain. On the other hand, in terms of the influence of Chinese culture, general AI platforms like DeepSeek, social platforms like TikTok, and cultural IPs like" Nezha 2 "have demonstrated strong international cultural influence. The' going out "of Chinese culture is characterized by content" China-fashion-ization,' diversified subjects, and extended ecosystems, driving the continuous enhancement of the international influence and appeal of Chinese culture.

3.2 Collaboration among Multiple Actors in Three Major Fields

From the perspective of field logic of optimizing cultural production relations, artificial intelligence enables the practice of building a strong cultural country by promoting the synergistic effect of multiple subjects in specific fields such as cultural innovation, heritage protection and global communication through technological innovation, policy guidance and resource integration.

The collaboration among the government, enterprises, and society in the field of cultural innovation and creation. In the realm where artificial intelligence empowers cultural innovation and creation, the roles of the government, enterprises, and society vary. Firstly, the government focuses on deepening the reform of the cultural industry system, building a collaborative platform among the government,

enterprises, and society, optimizing the incentive mechanisms for artistic creation, stimulating the enthusiasm of enterprises and social entities to engage in cultural originality, and promoting the construction of AI inclusive capabilities through basic public policies. Secondly, enterprises should leverage AI technology to create cultural IPs, driving the iterative upgrade of cultural production, circulation, and consumption. Lastly, social entities should utilize user-generated content platforms to stimulate grassroots creativity, fostering a bottom-up cultural innovation path.

Second, the collaboration among government, enterprises, and communities in the field of cultural heritage protection and inheritance. In the realm where artificial intelligence empowers the protection and inheritance of cultural heritage, cultural institutions, research universities, and community residents play a crucial role. Firstly, museums, libraries, cultural centers, and exhibition halls, with the support of government policies and technological advancements from businesses, actively apply AI technology. For instance, the restoration of Notre-Dame Cathedral in Paris demonstrates how AI can facilitate the digital collection, precise preservation, in-depth research, and innovative presentation of cultural heritage. Secondly, research universities conduct AI-supported projects on cultural heritage protection, exploring technologies for preservation, restoration methods, and ways to realize cultural value through AI, thus providing talent support for the protection and inheritance of cultural heritage. Lastly, community residents, who have a deep emotional connection and value recognition of cultural heritage, serve as protectors, inheritors, and learners of both tangible and intangible cultural heritage.

The third aspect is the collaboration among government, enterprises, and society in the field of international cultural influence. In the realm where artificial intelligence empowers international cultural influence, this collaboration transcends national boundaries. First, governments establish international cultural exchange and cooperation systems at the global, regional, and inter-state levels, creating platforms and organizing activities such as the "China-ASEAN Year of People-to-People Exchanges" and the "Belt and Road Road International Cultural Exchange and Cooperation." Second, enterprises leverage AI technology to tap into international cultural resources, build networks for international exchanges and cooperation, and promote the continuous evolution of international cultural production, circulation, and consumption. Third, various sectors of society provide intellectual support through AI in the international arena, conduct talent training, and enhance the capabilities of developing countries in cultural innovation, creation, and the protection and inheritance of cultural heritage.

3.3 Optimization of Value Ecology in Three Major Fields

From the perspective of the field logic of innovation in the cultural superstructure, the government, market, society, and international forces collaborate to promote the value distribution of cultural products among various cultural entities, including small and medium-sized enterprises and platform companies, capital and labor, users and AI platforms, dominant ethnic groups and ethnic minorities, developed and developing countries. This collaboration aims to reconstruct the value distribution in the specific context of building a culturally strong nation through artificial intelligence, fostering an

inclusive cultural value ecosystem.

The first aspect is the optimization of the value ecosystem in the cultural innovation and creation field. This primarily involves two areas: the cultural industry and cultural undertakings. On one hand, the optimization of the value ecosystem in the cultural industry sector. The government should aim to guide and promote the development of a collaborative network for the cultural industry, characterized by technological empowerment by platform companies, participation from small and medium-sized enterprises, balanced distribution of labor value, and legal protection of user rights. This is to prevent issues such as platform monopolies, imbalances in the capital-labor relationship, and damage to public interests, and to effectively address issues like AI face-swapping that infringe on rights and laws. On the other hand, the optimization of the value ecosystem in the cultural undertakings sector. By utilizing AI-driven public cultural service platforms, equal access to intelligent network resources should be provided to ethnic minorities, underdeveloped regions, and impoverished groups, thereby narrowing the regional and technological gaps in accessing intelligent network resources and building capabilities.

Second, the value ecosystem optimization of cultural heritage protection and inheritance. This involves addressing the conflicts between the market development and utilization of traditional cultural heritage and its protection and inheritance. A multi-stakeholder collaborative governance mechanism should be established to address these conflicts, involving AI service providers, the entities of traditional cultural heritage, and consumers or users. Traditional craft-based culture, characterized by its time-specific, exclusive, and intangible nature, should receive enhanced intellectual property protection. Particularly, the increasing reliance on AI creation and product promotion models has raised questions about human subjectivity, necessitating the establishment of ethical standards, organizations, and review mechanisms for artificial intelligence to ensure harmonious coexistence between humans and AI.

The third aspect is the optimization of the value ecosystem in the field of international cultural influence. This involves achieving a moderate balance between the cultural empowerment role of international AI capabilities and their construction between developed and developing countries, as well as between China and foreign countries. On one hand, it is necessary to establish multi-language intelligent cultural dissemination channels, engage in actions to build AI capabilities and exchange cultural resources, and overcome the "cultural discount" caused by factors such as power, content, and space. On the other hand, it is essential to formulate global AI governance standards, construct a global AI governance platform, and conduct global AI governance activities, with the aim of preventing the loss of national cultural subjectivity in international cultural exchanges and dissemination, and effectively ensuring national cybersecurity and cultural security.

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