

Digital Communication and Preservation of Cultural Heritage in the Context of New Media: A Case Study of Anyang

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Abstract

Anyang is rich in diverse cultural heritage, including the famous Yin Ruins, oracle bone script, Shang Dynasty culture, and divination beliefs. These heritages are core carriers of cultural transmission and important academic research areas. This study analyzes the adaptability of Anyang's cultural heritage amidst modern social changes, focusing on its integration with local economic development strategies. By activating the tourism market and image industry, it promotes economic growth and cultural transmission. The study also explores the digitization of literature and new media tools in modernizing educational content. Through visual media, Anyang's cultural heritage overcomes geographical barriers, connecting with a global audience. Visual narratives present Anyang's history and cultural stories, offering new paths for global recognition. Films, micro-dramas, online media, and other visual art forms transform Anyang's cultural narratives into symbols easily understood worldwide. The study encourages more film and television creators to explore Henan and Anyang, discovering the value of historical and cultural resources and landscapes through high-quality works.

Keywords: Digital Communication, Preservation of Cultural Heritage, New Media, Anyang

1. Introduction

In the contemporary era, characterized by the rapid development of new media technology and an increasingly diversified information society, the environment surrounding traditional cultural heritage has undergone significant changes and faces unprecedented challenges. Public aesthetic preferences are continually evolving, prompting content creators to explore and update visual narrative techniques to more vividly and profoundly showcase the value and unique aesthetic qualities of cultural heritage. The integration of content creation and diverse technological means effectively breaks the monotony of traditional presentation methods, enhancing the artistic appeal of visual works. This not only meets the aesthetic expectations of modern audiences but also plays a positive role in the dissemination and inheritance of cultural heritage.

Traditional Chinese cultural heritage, both tangible and intangible, embodies the spiritual wealth of the nation and plays an indispensable role in ensuring cultural continuity and diversity. However, cultural heritage often faces marginalization due to modernization and economic pressures. The preservation and proper utilization of cultural heritage can revitalize it and enhance a country's cultural soft power and international image, which is crucial in the context of globalization.

Among various artistic expressions, visual media, with its unique mode of transmission, plays a crucial role in the protection and revival of cultural heritage. Digital museums and micro-dramas capture and permanently preserve the most vibrant elements of historical narratives through highly accurate historical reenactments, while fully utilizing their advantages as communication tools to enhance public understanding and recognition of cultural heritage and its core spirit. These digital forms build a bridge between the past and the future, tradition and modernity, providing strong support for the long-term prosperity of cultural heritage.

Especially in Anyang, the localized application demonstrates the immense potential of digital media technology in interpreting and presenting cultural heritage, particularly in improving audience experience, enhancing interactivity, and promoting educational value. Anyang is rich in diverse cultural heritage, including the famous Yin Ruins, oracle bone script, Shang Dynasty culture, and divination beliefs. These heritages are not only core carriers of cultural transmission

but also important areas of academic research.

As a reflection of the profound history and cultural heritage of the Chinese nation, traditional Chinese cultural heritage not only embodies the spiritual wealth of the nation but also plays an indispensable role in ensuring cultural continuity and diversity. Given its irreplaceability, cultural heritage should not be neglected or abandoned in the course of modernization. In today's economy-oriented society, cultural heritage is often marginalized due to its lack of direct economic benefits, diminishing public enthusiasm for cultural dissemination. However, the protection and proper utilization of cultural heritage actually harbor tremendous commercial potential. Effective preservation and promotion measures can not only revitalize cultural heritage but also enhance a country's cultural soft power and international image, which is particularly crucial in the context of globalization.

This study aims to explore strategies for the dissemination and preservation of cultural heritage to promote economic development while enhancing national global recognition and cultural influence. By studying the digital application models of cultural heritage, particularly using Anyang as a case study, this research demonstrates the possibilities for effective transmission and inheritance of traditional culture through modern technological means. This provides theoretical support for the protection of cultural heritage and practical guidelines for implementation.

In summary, the integration of new media technologies and digital applications presents a unique opportunity to address the challenges faced by traditional cultural heritage in a rapidly changing information society. By focusing on Anyang's rich cultural heritage and leveraging modern technological means, this study aims to provide both theoretical and practical insights into effective strategies for cultural heritage preservation and dissemination. This holistic approach underscores the importance of safeguarding cultural heritage as a vital component of national identity and global cultural diversity.

2. Research Method

This study selects Anyang a city with a profound cultural history in China as the core of the case study to explore its importance in the dissemination of Chinese civilization and the richness of its intangible cultural heritage (Zhang et al. 2019). Anyang holds a significant position in Chinese history known as the "Ancient Capital of Seven Dynasties." Seven dynasties including Cao Wei Later Zhao Ran Wei Former Yan Eastern Wei Northern Qi and the famous Shang Dynasty established their capitals here. As one of the important birthplaces of ancient Chinese civilization Anyang is a treasure trove of intangible cultural heritage possessing unique cultural and historical value (Li 2021).

The case study approach involves several sub-approaches, including historical analysis, digital media application assessment, and economic impact evaluation. The historical analysis examines the cultural and historical significance of Anyang. The digital media application assessment explores how modern technologies, such as augmented reality (AR), virtual reality (VR), and blockchain, are utilized to preserve and promote cultural heritage. The economic impact evaluation analyzes the integration of cultural heritage with local economic development strategies, focusing on tourism and the image industry.

3. Literature Review

Anyang is particularly renowned for the Yin Ruins, which was the capital of the Shang Dynasty. The oracle bone inscriptions and bronze artifacts unearthed in this area provide invaluable material for studying early Chinese script, history, art, and social structure (Wang, 2020).

Moreover, the environmental renovation and exhibition upgrade of the Yin Ruins Museum, through the utilization of big data, blockchain, and intelligent technology, as well as cutting-edge technologies like the metaverse, digital cloning, and virtual reality, have enhanced the interactivity and educational value of the exhibits. Through visual media, a comprehensive digital platform for Shang culture, integrating experience, service, interaction, and intelligence, has been successfully constructed. The digital application model of cultural heritage provides an empirical basis for the protection and dissemination of other cultural heritage projects, demonstrating the potential for effective transmission and inheritance of traditional culture through modern technological means.

According to UNESCO's definition, tangible and intangible cultural heritage are distinct concepts. Tangible cultural heritage refers to concrete, physical cultural products such as buildings, artworks, documents, and archaeological sites. These heritages can be ancient or relatively modern, providing direct evidence of human creativity and technological development. Intangible cultural heritage (ICH) refers to cultural expressions created, maintained, and transmitted by communities, groups, or individuals, derived from social traditions, historical experiences, and creative wisdom (UNESCO, 1972). It is not only a crucial component of cultural diversity but also plays a key role in promoting cultural dialogue and sustainable development (Bak, 2018). UNESCO's Convention for the Safeguarding of the Intangible Cultural Heritage provides a formal definition of ICH (UNESCO, 2003), categorizing it into oral traditions and expressions, social practices, rituals and festive events, knowledge and practices concerning nature and the universe, traditional craftsmanship, and related skills, including music, dance, drama, folk art, and ritual performances (Gian, 2022).

Broadly, cultural heritage encompasses both tangible and intangible heritage, and this study does not distinguish between them.

In the field of cultural heritage, scholars have proposed various methods and perspectives for protection. Xin (2022) emphasized the importance of the Memory of the World (MOW) program and other UNESCO initiatives in raising global awareness and protection of intangible cultural heritage. According to Lai and Bai (2021), the emergence of new media provides an effective modern approach for the protection and promotion of ICH. Georgios et al. (2022) mentioned that ICH symbolizes the cultural spirit of a nation, and documentaries, as a medium, play a crucial role in preserving and promoting cultural memory and national identity. For example, Zhang (2023) explored how the independent documentary "In Search of Handicrafts" enhances the visibility and impact of ICH through visual recording techniques.

Pistola et al. (2021) focused on creating immersive experiences through platform development, particularly highlighting the customs and dances of Greek culture. Yu et al. (2022) proposed an application model for the protection and dissemination of cultural heritage, advocating the use of multimedia, internet, and broadcasting to promote the transmission and development of cultural heritage among the public.

Swanson and Johannigman (2022) employed the autoethnography method to describe the practical use of public television film production in storytelling about cultural and heritage tourism. This highlights the importance of using new media dissemination methods and documentary production to enhance cultural visibility.

However, Chocano (2019) pointed out that the use of audiovisual media as an auxiliary tool in the field of heritage studies is not yet widespread, especially in the production of films and documentaries for cultural dissemination. This underscores the importance of creating academic works in audiovisual formats. As some scholars have noted, despite the profound significance of critical heritage studies for understanding and protecting cultural heritage, the practice of using multimedia tools such as images and sound to explore and disseminate remains insufficient. Moreover, the extensive use of digital media production significantly impacts the comprehensive popularization and protection of cultural heritage.

In the protection and dissemination of cultural heritage, the application of digital technology has become a focus of academic research. Denis and Trček (2022) explored how blockchain technology enhances the dissemination and protection of cultural heritage by ensuring data security. Boutsis et al. (2021) highlighted the role of augmented reality (AR) technology in increasing public engagement and sustainability. Jin and Liu (2022) studied how virtual reality (VR) technology enhances understanding of cultural heritage through immersive experiences. Eike (2020) demonstrated the potential of computer graphics (CG) systems in cost-effectively reconstructing heritage sites virtually. None and Habbatulmarisa (2023) emphasized the importance of digitization in protecting and transmitting Sri Lanka's traditional cultural heritage.

These studies collectively highlight the critical role of digital technology in cultural heritage protection. However, there is a lack of empirical research in China, especially concerning the cultural ancient city of Anyang. Therefore, this study aims to fill this gap by systematically researching and analyzing Anyang, a city with profound historical and cultural significance, using digital technology strategies. The study explores how to effectively utilize AR, VR, and systematic digital imagery to provide innovative solutions for the protection of Anyang's cultural heritage and to summarize its dissemination forms, aiming to offer reference and guidance for the protection and dissemination of similar cultural heritage.

4. Discussion and Analysis

4.1 Application of Modern Technology in Cultural Education

Government departments utilize cutting-edge technologies such as 5G panoramic video capture and holographic imaging to enable children to learn about the origins of civilization and understand the deeper connections of culture from an early age. This approach not only enhances the educational value of cultural heritage but also ensures its long-term preservation. However, while these technologies provide innovative ways to engage the public, there is a need for critical evaluation of their effectiveness in conveying the intrinsic values of cultural heritage.

These efforts break the traditional boundaries of physical space and information dissemination, ensuring the long-term preservation of cultural heritage integrity and greatly expanding the possibilities for knowledge acquisition. Through mobile applications, users can achieve panoramic virtual visits, bringing economic and social benefits to the local area (Wang et al., 2024). Additionally, it provides valuable experiences and insights for other regions to combine theory and practice in the protection, transmission, and commercialization of culture (Yang, 2022).

4.2 The Role of Online Films in Cultural Heritage Transmission

The development and dissemination of online films have become an important cultural phenomenon, complementing the existing film industry model. In the process of intangible cultural heritage transmission, online films embody the shaping

of common values and the proactive restoration of cultural heritage. For example, Anyang's project "The Legend of Wuhao" combines historical facts with folklore, offering viewers a culturally rich and patriotic audio-visual feast. However, it is crucial to critically reflect on how these films balance entertainment with accurate historical representation.

Additionally, the project "Walking Alone for Thousands of Miles," in collaboration with Shan Jixiang, the director of the Palace Museum, achieved success in the domestic market. The narrative of heritage transmission is a dynamic process that visualizes China's first female politician, presenting her with a heroic story core, new perspectives, and narrative methods to a global audience. Furthermore, a series of IP web dramas about Shang culture have been produced, combining historical elements with living cultural elements to artistically reshape history, enhancing its appeal and dissemination efficiency. Due to its enormous potential in cultural inheritance and innovation, online films, with their unique advantages such as fast production cycles, lower costs, rapid dissemination efficiency, and a broad audience base, have significantly contributed to showcasing the spiritual symbols and cultural essence of Chinese civilization, gradually becoming a strong complement to traditional cinema.

4.3 Digitalization and Interactive Innovation of Museum Exhibitions

With the increasing spiritual needs of tourists, tourism products are continuously evolving towards richer cultural content and deeper interactive experiences. In line with the trend of enhancing audience engagement, the new Yin Ruins Museum has innovatively improved the interactivity and educational value of its exhibitions by showcasing nearly 4,000 precious artifacts, including bronze ware, pottery, and jade, using artificial intelligence and multimedia digital technology, making the artifacts "come alive" in a novel way.

The application of naked-eye 3D technology allows precious artifacts from the Shang Dynasty, such as the kneeling jade figure and the Yachang ox statue, to be presented in a three-dimensional form within the same space. This not only creates a visual enjoyment but also serves as a cultural communication platform, providing visitors with an intuitive experience of ancient craftsmanship. By adopting digital virtual imaging technology, the Yin Ruins Museum has achieved an augmented reality (AR) visual experience by overlaying static artifacts, enabling artifacts to transcend the limitations of time and space, and presenting them dynamically and three-dimensionally to the public. This enhances the understanding of the historical context of cultural heritage and the functional use of artifacts, promoting the attractiveness and educational significance of the exhibits.

4.4 Digital Exhibition Technology and Cultural Communication

Deputy Director Zhao Qingrong mentioned the combination of transparent LED screens and digital virtual imaging as another innovative initiative in digital exhibition at the Yin Ruins Museum. This approach breaks the limitations of display cabinets, creating an interactive space for artifacts, history, and digital virtual spaces. The digital immersive exhibition model promotes the dissemination and modernization of traditional cultural heritage.

In the exhibition practices at the Yin Ruins Museum, the "Who Am I?" Oracle Bone Script Hall uses digital media technology to build a bridge between ancient cultural heritage and modern audiences. The hall occupies a central position in the museum, using laser projection technology to enlarge and project fragments of oracle bone script onto artistic replicas. This method not only recreates the living scenes of the Shang Dynasty but, more importantly, transforms static texts into dynamic visual language, enhancing the communicative power and impact of historical stories.

By translating the ancient language of oracle bone script into modern Chinese and then into digital image language, museum staff member Li Tian pointed out that historical stories are restored in digital imagery, deepening the audience's understanding of the records inscribed on the oracle bones. The digital transformation makes the dissemination of historical culture more intuitive and interactive, promoting public learning and recognition of historical knowledge.

Moreover, the museum has introduced user interface (UI) technology to create immersive scenes and experience zones, incorporating digital image materials for visitors to watch. By adding narrative elements to video imagery, the museum has created more than ten types of human-computer interaction experience zones. They have produced short films, using 5D and AR technologies to enhance sensory experiences, allowing visitors to immerse themselves and understand the creative process of cultural products. The experience zones enhance public participation through interactive games and challenges, making the study of Shang culture more vivid and engaging. Deputy Director Zhao Qingrong introduced an interactive oracle bone quiz exhibit that uses gesture-sensing trackers for mid-air interaction, further demonstrating the potential of digital media technology in enhancing educational interactivity.

Finally, through the combination of mechanical control technology and sound, light, and electrical performance technology, the museum's exhibition halls have been transformed into multimedia art installations. The central LED screen, guided by the concept of the "Gate of Shang Culture," provides an immersive exploration space for visitors. This approach allows visitors to deeply understand the production, life, divination, and sacrificial culture of the Shang Dynasty, experiencing the glory of history. Thus, by integrating digital media technology, the Yin Ruins Museum has not only

recreated the cultural environment of the Shang Dynasty in physical space but also reconstructed the public's understanding of Shang civilization on cognitive and emotional levels, highlighting national sentiments and creating cultural value.

4.5 Visual Documentation and Dissemination Strategies of Intangible Cultural Heritage

When creating films about intangible cultural heritage, creators use artistic methods to deeply explore and reproduce these traditional cultures. They not only strive to capture their external forms and techniques but also focus on uncovering their intrinsic values and meanings. Through carefully designed soundscapes, delicate image capture, and captivating storytelling, documentaries aim to reposition these cultural traditions in modern society, showcasing their relevance and vitality in contemporary times. Additionally, documentaries highlight the social and economic potential of intangible cultural heritage projects, shaping a positive public perception and guiding audiences to reevaluate and pay attention to these cultural heritages, thereby opening new paths for their transmission and development. Through such multidimensional narrative and display strategies, documentaries, as a cultural intervention, not only preserve the history and techniques of intangible cultural heritage projects but also promote emotional connections and interactive participation between audiences and intangible cultural heritage, evoking widespread resonance and contributing to the sustainable development of intangible cultural heritage.

The innovative application of digital means and visual documentation can enhance the appeal and interactivity of intangible cultural heritage, expand its dissemination boundaries, and increase its social influence among the public. Such strategies can not only stimulate public memory and recognition of traditional culture but also transform intangible cultural heritage into a cultural phenomenon beyond the guardianship of a minority group.

In Anyang City, Henan Province, a new cultural performance named "Moonlight Tour on Huan River" has been launched in the Huan River Moon Island area. The event takes place every Friday and Saturday evening at 7 PM along the banks of the Huan River. This performance project, set against the historical backdrop of the Yin Ruins and the Huan River, focuses on showcasing Anyang's cultural heritage. The event cleverly integrates elements of theater and film production, utilizing sound effects, lighting, scenery, and projection technology to provide an immersive viewing experience. During the night tour, the audience includes not only local residents and tourists present at the site but also tens of thousands of online viewers through live streaming platforms, collectively witnessing a feast of light and shadow, allowing the audience to sensorially engage with and understand the history and culture of Anyang (Huang, 2024).

The regular programs in the "Moonlight Tour on Huan River" performance series include "Fu Hao's Expedition," "Song and Jin Dynasties' Saga," "Famous Minister Han Qi," and "Legacy of Wei Wu," each depicting significant figures and events in Anyang's history. These programs explore and showcase key personalities and periods in local history. The immersive light and shadow show uses ecological media to enhance its appeal and impact on the new generation of audiences, finding emotional entry points to provide a richer and more diverse historical and cultural experience through multi-sensory engagement.

Project operation manager Huang Feihua stated that the team would continuously optimize the program content, aiming to tell the stories of the Yin Ruins oracle bones, making Anyang's historical context and cultural heritage not only visible and tangible but also inheritable (Huang, 2024). Through this innovative form of cultural performance, the combination of Anyang's history and modern technology provides the audience with a new way of understanding, aiming to enhance public recognition and awareness of the preservation of local historical culture, and highlighting national confidence.

4.6 The Unique Role of Micro-Dramas in Cultural Heritage Transmission

In the current micro-drama market, where traffic is the core metric, micro-dramas have facilitated a deeper understanding of the historical and cultural value behind museum collections. The impact of these dramas is significant, effectively enhancing public awareness of the transmission and protection of Chinese cultural heritage. For example, the micro-drama "Escape from the British Museum," with its unique narrative technique and compact storyline, quickly became a hot topic online, leveraging the high-profile issue of missing Chinese artifacts in the British Museum.

This three-episode drama, with a total runtime of less than 20 minutes, rapidly rose to be one of the most popular short dramas of the year. It vividly depicts, in an anthropomorphic manner, a Chinese celadon jade vase with entwined branch patterns that escapes from the British Museum and encounters a Chinese journalist working abroad, seeking help to return to its homeland. As the viewership surged, it garnered high click rates and likes on mainstream social media platforms. As of the 12th, the drama accumulated 410 million views and over 27 million likes on the Douyin platform, while each episode surpassed 10 million views on Bilibili. This micro-drama not only achieved high audience engagement and positive reviews but also marked a new pinnacle in the development of the micro-drama format.

Amid the burgeoning development of new media formats, the Yin Ruins Museum in Anyang astutely recognized the potential of micro-dramas as a communication tool and developed the "Museum Artifacts Come Alive" series. This series,

promoted widely through WeChat public accounts, Douyin accounts, and other mainstream video-sharing platforms, effectively disseminated knowledge and understanding of Shang civilization. The episodes, narrated in the first person, revolve around the stories of King Wu Ding and General Fu Hao, meticulously depicting the historical background of artifacts such as chariots, daily items, military equipment, oracle bones, and ritual items related to these historical figures. By integrating cultural heritage with the life scenes of their original owners, the micro-dramas not only imbue the artifacts with emotions and personalities but also strengthen the audience's sense of belonging to their national history, sparking widespread public interest and in-depth discussion.

In the bidirectional interactive environment of new media, the information transmission mechanism has evolved from traditional one-way flow to an interactive dialogue between audience and content creators. Audiences are now included in the process of cultural dissemination, becoming co-creators and collaborators in the dissemination and creation of culture. This participatory exchange model not only enhances the spread of cultural heritage but also deepens the public's understanding and emotional resonance with historical culture, fostering the construction of cultural identity.

4.7 Micro-Dramas as Vessels of Cultural Memory and Catalysts for Social Cohesion

Artifacts, as embodiments of ancestral wisdom and spirit, not only record the historical changes of a nation but also constitute core elements of national culture. The use of micro-dramas in this medium has evolved from initial novel displays to becoming carriers of collective memory, activating cultural memories related to specific historical periods and Chinese artifacts. Driven by digital productivity, this mode of dissemination has maintained the vitality of historical cultural heritage, transforming the techniques of material culture into the inheritance of cultural spirit and collective memory.

Collective memory plays a crucial role in the transmission of national cultural heritage. Micro-dramas act as anchors that trigger and construct memory, linking historical memory with contemporary reality. Cultural heritage narratives not only preserve the past but also reaffirm cultural identity and maintain historical continuity. Through such storytelling, nations demonstrate their commitment to unique cultural symbols, traditional knowledge, and skills, while reinforcing the elements that form the core of national identity.

Moreover, the social interaction functions of internet platforms, such as bullet comments and reviews, significantly enhance audience participation. Compared to grand commemorative days and educational activities, this form of participation is more proactive and serves as a more effective memory activation mechanism. Therefore, the cultural transmission form of micro-dramas is not just a retrospective of the past but also has a profound impact on maintaining and developing cultural traditions through collective visions and values.

Micro-dramas embed deep cultural values, such as patriotism, within their concise and appealing content, establishing an interactive ritual connection among creators, audiences, and among audiences themselves. Emotional resonance triggers the collective release of emotional energy, consolidating the continuity of ritual interaction, and aiding in the construction of group identity. This bidirectional interaction enhances the function of micro-dramas as information carriers, and more importantly, successfully acts as a catalyst for cultural and social cohesion, strengthening the public's emotional connection to shared cultural heritage and social solidarity.

Especially on digital streaming platforms such as Douyin, Kuaishou, and Bilibili, core audiences have high expectations for the cultural content and aesthetic standards of micro-dramas. They seek multi-layered experiences in audiovisual expression and aesthetic construction. As an emerging media form, micro-dramas cater to the public's preference for consumption under compressed time conditions, addressing the fragmented viewing habits of fast-paced life and the increasing demand for entertaining, relaxed, and interactive aesthetics.

In terms of visual presentation, the structure and lens language of micro-dramas are deeply influenced by Chinese classical aesthetics, reflecting the creators' respect and pursuit of traditional aesthetics. Through the self-narration of artifacts, viewers are taken back to the historical times coexisting with the artifact owners, with the form of expression strengthening the emotional connection between cultural heritage and modern audiences. Along the storyline, the profound emotions of the era are felt, making cultural heritage not cold exhibits but witnesses full of stories and life. The stories depict the cultural background, social landscape, and human spirit of the era, concretizing abstract history and creating programs imbued with the beauty of Chinese traditional spirit and intangible cultural heritage. The structure and lens language of the visuals exhibit the creators' adherence to and pursuit of Chinese classical aesthetics, allowing viewers to enjoy the sensory experience while aesthetically dominating, gradually enhancing the audience's interest in Anyang's regional culture. This is significant for promoting interest in regional culture and protecting traditional cultural heritage.

Therefore, enhancing the intuitive sensory experience of micro-dramas in film and art design is particularly important. This not only attracts a loyal audience deeply interested in cultural heritage but also facilitates swift and efficient information dissemination. Optimizing the dissemination methods of micro-dramas ensures a broader impact among the

target audience, thereby playing a significant role in cultural transmission and aesthetic education.

5. Limitations and Implications

The main limitations of this research include the focus on a single case study, which may not be generalizable to other regions or cultural contexts. Additionally, the rapid development of digital technologies means that some methods discussed may quickly become outdated. The implications of this research are significant for cultural heritage preservation and promotion. The findings highlight the potential of digital media to enhance the visibility and appreciation of cultural heritage, thereby contributing to economic development and cultural soft power. The study also provides practical guidelines for policymakers and cultural practitioners on integrating modern technologies into heritage preservation strategies.

6. Conclusions

In the contemporary media environment, the emergence of well-edited short videos has not only reshaped the interaction between large and small screens but also served as a conduit for traffic and promotional media. This format effectively converts public traffic on social media into private traffic, maximizing economic benefits. Additionally, it significantly enhances public awareness of cultural heritage. The "traffic code" of micro-dramas successfully attracts a large number of tourists to the ancient cultural city of Anyang, deepening their understanding of Shang civilization and traditional culture. By choosing to promote on high-traffic media platforms, relevant promotional departments leverage public interest in traditional excellent culture. Moreover, relying on the sharing mechanisms of various social platforms, micro-dramas adopt a viral dissemination strategy, which in the long run will break the limitations of traditional long-video narratives and innovate the depth and breadth of content.

Online films, through their innovative content and dissemination strategies, play a crucial role in strengthening the protection of intangible cultural heritage and promoting common values. The multi-channel dissemination paths of new media further enrich the presentation forms of Chinese traditional spirit and intangible cultural heritage, making programs and styles more diversified and establishing IP symbols.

Additionally, government departments utilize high-tech digital means such as 5G, 3D, AR panoramic video, and holographic technology to create an immersive experience environment. This allows audiences to deeply understand the origins of civilization and cultural exchanges through virtual scenes and images. Large-scale performances enhance audience participation, using intuitive and interactive viewing forms to convey the essence of culture. These technologies break the boundaries between physical space and information dissemination, opening new paths for cultural heritage protection and knowledge transmission. Meanwhile, leveraging digital platforms and cutting-edge technologies such as big data and the metaverse further promotes the inheritance and innovative development of traditional culture. As audience interest in cultural heritage increases, the related consumer culture industry chain will also be boosted, doubly satisfying the audience's demand for aesthetic and entertainment products.

Moreover, the combination of culture and technology has created new economic growth points, driving the development of related industries such as cultural and creative products, tourism, and education, forming a diversified cultural consumption market. This not only provides consumers with a variety of choices but also injects new vitality into the long-term development of cultural heritage, achieving a win-win situation for both cultural and economic value.

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Authors contributions

Li was responsible for the study design and revising. Li and Yu jointly handled data collection, coding, and drafting the manuscript. Li drafted the main part of the manuscript, while Yu wrote the other parts. Both authors read, revised, and approved the final manuscript.

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