Review

Analysis of the diverse advantages and paths of traditional culture dissemination in online games

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Abstract: With the development of the new media era, factors such as digitization and entertainment are driving changes in the way traditional culture is disseminated. In comparison to traditional distribution media, online games are more vivid, capable of retaining the characteristics of traditional culture while undergoing a livelier transformation and development, and are disseminated in a manner that is widely appealing to the masses. This study, based on the new media characteristics of online games and combined with the current situation of traditional culture dissemination in China and domestic game cases, analyzes the diverse advantages of online games in cultural dissemination, including form, content, promotional methods, and cross-border linkage. It summarizes a dissemination path system starting from three points: cultural resources, game content, and game audience, in order to contribute to the enhancement of the dissemination value of online games and the promotion of contemporary dissemination of traditional culture.

Keywords: new media; online games; traditional culture; dissemination path

1. Introduction

Traditional culture, characterized by its long history, national characteristics, and broad and profound essence, constitutes an essential component of Chinese cultural soft power. The inheritance and development of outstanding traditional cultures remain enduring themes of our time. In the era of new media, the innovative development of concepts and technologies related to the 'metaverse' is quietly driving profound changes in people's ways of accessing and disseminating information. Highly realistic virtual environments, intelligent interactive technologies, and personalized content customization mechanisms are reshaping the ways and patterns through which people obtain information. In conjunction with the development of the times and the current status of traditional culture dissemination in China, finding adaptable means of dissemination to inherit and develop traditional culture is an important response to contemporary challenges.

In the dissemination process, human beings themselves are the most primordial and core medium, and the medium, as an extension of the person, digital media technologies, by reshaping the "digital body" as an embodied entity, significantly enhance human subjectivity, thereby empowering communication [1]. The evolution of digital technology is transitioning from mere digitization to intelligence. As a result of this transition, there are multiple changes occurring in the dissemination of traditional culture, concerning its forms to the involvement of participants. Notably, online games, renowned for their vividness, interactivity, and embodiment, serve as a potent conduit for disseminating traditional culture, offering immersive

experiences that engage players in the exploration and preservation of cultural heritage. Through interactive storytelling, realistic visualizations, and engaging gameplay mechanics, video games have the power to bring ancient traditions and historical narratives to life, fostering a deeper understanding and appreciation of traditional culture among players and embodiment a powerful carrier of cultural transmission [2]. While scholars as Wu [3] have extensively analyzed the merits and cultural implications of online games as communication mediums, Scholars such as Luo [4] and Ren [5] have explored the two-way role between online games and traditional culture. Scholars such as Chen [6], Hu and Zhu [7] have contributed to the way of contemporary communication for the traditional culture-based online games; however, the mentioned studies have lacked on building a specific and systematic model based on the characteristics of online games and the current situation of traditional culture transmission. This paper analyzes the multiple advantages of online games as a cultural communication medium, focused on three different levels: the utilization of cultural assets, gamming environments, and the establishment of dissemination mechanisms for Chinese traditional culture.

2. Analysis of the communication tendency of traditional culture dissemination in the new media era

In the context of the new media era, cultural heritage has gained increased significance, and the dissemination model of traditional culture is undergoing significant changes. The increased interactivity reduces the distance between culture and people [8], which allows users to experience intangible cultural heritage from inside to outside in the new media era from a new perspective, feels the spiritual power contained in intangible cultural heritage, and has a sense of identity with the value behind intangible culture, thereby making intangible cultural heritage more accessible to the younger generation. Traditional culture, as the spiritual symbol and cultural heritage of a nation, needs to be closely integrated with the characteristics of the times for transformation and innovation in order to be rejuvenated with new vitality. In the context of globalization, the importance of shaping national image and cultural output is increasingly prominent. Utilizing technological means, which includes actively seeking and creating cultural dissemination platforms that meet the requirements of the times, not only contributes to the inheritance and development of domestic culture but also enhances the influence and discourse power of Chinese traditional culture on the world stage. Therefore, in the current era, the trend in traditional culture dissemination involves seeking suitable media for dissemination and constructing new pathways for cultural transmission.

2.1. Policy guidance

At the policy level, China has put forward new requirements for finding cultural dissemination paths that adapt to the development of the times in the new-era context. Chinese efforts in constructing and developing its cultural system demonstrate greater initiative and stronger confidence. On one hand, national policies encourage media institutions to intensify the promotion of traditional culture. On the other hand, national policies also emphasize the innovative

development of traditional culture. While inheriting traditional culture, efforts are made to integrate modern technology and meet the demands of the times to achieve transformation and development. Combining the characteristics of the times with the current development status of Chinese traditional culture, finding Chinese own ways of communication to inherit and develop traditional culture is an important measure in response to contemporary challenges.

2.2. User-oriented

The increasingly evident "democratization of production technology" [9]. The digital representation of traditional culture has diversified in terms of production methods; it significantly lowers the barriers to content creation, allowing a vast number of users to easily participate in cultural production. This democratized production model has given rise to a large amount of User-Generated Content (UGC). The surge in UGC not only enriches the diversity of the cultural market but also profoundly changed the pattern of traditional culture dissemination. Ordinary users can share their viewpoints, creativity, and work through new media platforms. These contents quickly spread on social media, giving rise to a grassroots cultural force.

3. Diverse advantages of online games in the dissemination traditional culture

The rapid evolution of technology has provided essential support for transforming methods of information dissemination. Among the diverse digital media, online games stand out for their liveliness, interactivity, and innovation. Throughout their development, they have provided an excellent platform for the exploration, utilization, and dissemination of outstanding traditional Chinese culture. Online games, as a medium participating in the transformation of information dissemination methods, continuously innovate their expression methods to adapt to the development of the new media era. Combined with the inherent characteristics of games themselves, online games have formed a cultural dissemination model that is distinct from traditional media, offering a more diverse and enriched approach to cultural transmission.

As of June 2023, the Chinese internet user base reached 1.079 billion people, with an internet adoption rate of 76.4% [10]. According to the "2023 China Game Industry Report," as of 10 December 2023, the number of online game users in China reached 668 million, representing a year-on-year growth of 0.61%, reaching a historical high point. Based on data from the past five years (**Figure 1**), it is evident that the Chinese online game user base has remained stable at around 650 million, comprising over 60% of internet users. Therefore, it is clear that online games, as a medium for disseminating traditional culture, have established a broad audience base and dissemination advantages.
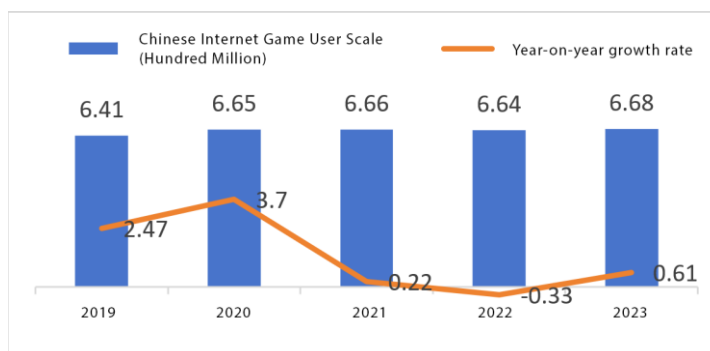
Figure 1. Scale and growth of internet users in China [11].

3.1. The substantial richness in both, form and content

Online game dissemination combines the transmission of symbols with experience and virtual practices [12]. Compared to traditional media, online games present a richer array of elements to the audience during dissemination. Players can engage in comprehensive gaming experiences through various means of coordination, such as visuals, text, music, voice, and interactive feedback. In terms of traditional cultural dissemination, these advantages afford greater freedom in both outward appearance and spiritual embodiment. Whether it's level plots, character illustrations, or gameplay design, they can be seamlessly integrated to evoke emotional resonance among players.

3.1.1. Interactive experience

Through their unique interactive nature, online games enable players to deeply engage in the experience of traditional culture. For example, Massively Multiplayer Online (MMO) games and other online cooperative games provide real-time interaction opportunities among players, allowing them to share and exchange knowledge, viewpoints, and experiences about traditional culture within the game. Additionally, players can establish connections with others from around the world, sharing the unique aspects of their respective cultures. Furthermore, interactivity goes beyond passive reception of cultural information; it makes traditional culture more vivid and engaging through participatory experiences. As the subjects of the experience, players become the drivers of their "virtual selves" [7]. The choice and decision-making systems within the game, such as props and missions, provide opportunities for players to engage with traditional culture. Creative adaptations within the game, without deviating from historical accuracy, can allow players to learn about historical figures and become familiar with historical stories in a more relaxed and enjoyable environment.

3.1.2. Visual presentation

Currently, most Chinese large-scale online game development teams are continuously strengthening their technical capabilities. They achieve this by incorporating more realistic lighting effects, exquisite modeling, and lifelike scene designs. This approach maximizes the integration of traditional cultural details into the games, forming a unique parallel "meta society" [13], model to a certain extent. This high level of visual fidelity allows players to gain a deeper understanding and appreciation of the beauty, history, and values of traditional culture. Taking "Sword

Net 3" as an example, this game incorporates numerous elements from ancient Chinese martial arts culture, including splendid ancient costumes, traditional martial arts moves, and ancient martial arts legends. Through meticulously designed scenes and characters in the game, players can immerse themselves in a virtual world of martial arts and experience the profound cultural heritage of China.

3.1.3. Narrative construction

In terms of storytelling, online games effectively convey cultural stories and values through complex narrative structures and role-playing mechanisms. The non-linear narrative of games allows players to independently choose different storyline paths based on their decisions, thus forming personalized cultural experiences. Faced with the demand for vast amounts of material, the integration of new technologies opens up more possibilities for the narrative modes of online games. Taking AI technology as an example, the combination of games and AI will further enhance the player's sense of enjoyment, and the new form of AIGC (AI-Generated Content) creation will produce high-quality materials on a larger scale. The technical features of AIGC include massive data, cognitive interaction, and cross-modal integration [9]. enabling practitioners to harness the power of AI production, combining the quality advantages of PGC (Professional Generated Content) with the cost and speed advantages of UGC (User Generated Content) achieving mutually beneficial outcomes.

3.2. Alignment of promotional concepts with the core of traditional culture

Heritage-themed video games are crucial for engaging younger audiences in cultural education. By immersing players in virtual worlds that depict historical and cultural contexts, these games serve as interactive portals to bygone eras [14]. They offer both entertainment and education, allowing players to delve into diverse periods, civilizations, and cultural stories through exploration and interaction [15]. Outstanding online Locally produced games in China consistently adhere to mainstream values in their promotional concepts, playing an important role in moral education and value guidance. Domestically produced online games are not only an integral part of the entertainment industry but also an important representative of Chinese artistic forms. The plot stories in games often focus on conveying values such as justice, friendship, and altruism, which are aligned with the outstanding traditional cultural views of China; it highlights the concept of socialism with Chinese characteristics. In games, players not only find entertainment but also gain a deeper understanding of the inherent moral concepts and correct behavioral guidelines within the storyline.

According to the statistics from the "5th China Online Game Market Survey Report" released in 2024 (as shown in **Figure 2**), young people and users under the age of 25 account for over 67% of Chinese online game users (as shown in **Figure 3**). This data highlights the widespread influence of online games among the younger generation. The youth and adolescence period is an important stage for forming one's perspective on life, and domestic online games provide a platform for entertainment and relaxation through meticulously designed plots, characters, and

interactive experiences. Moreover, they subtly guide players' thinking, moral concepts, and value orientation.

Figure 2. Partial screenshots of "jian wang 3".
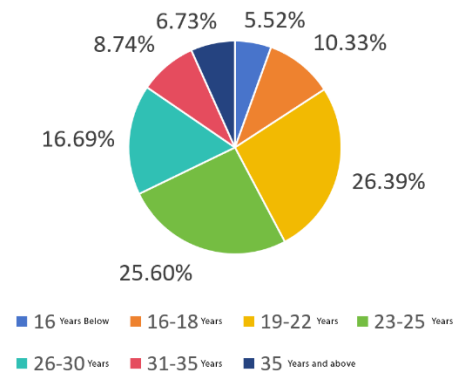

Figure 3. Age composition proportion of Chinese online game players.

At the same time, domestically produced online games are adopting an open and inclusive approach, sharing Chinese values and cultural charm with players from around the world, carrying the important mission of cultural promotion.

3.3. Opening up new possibilities through multi-dimensional cross-border cooperation

The multimedia integration, social nature, strong IP value, technological innovation, and globalization characteristics of online games enable them to easily collaborate with other industries, creating diversified entertainment experiences.

3.3.1. Creating cultural and creative intellectual properties (IP)

In the context of the development of contemporary digital media and interactive technology, the rise of the gaming industry not only signifies the birth of a new form of entertainment but also opens up new channels for the dissemination of traditional culture through cross-industry cooperation. This tendency is reflected in the growing collaboration between the gaming industry and artistic and cultural institutions. Taking the example of the mobile game "Tianxia" under NetEase, through NetEase's "Kuafu Project" cultural and creative strategy, the game showcases the integration of

game IP with elements of traditional culture, creating a series of co-branded cultural and creative products (as shown in **Figures 4** and **5**). Such cross-industry cooperation not only enhances the cultural value of game IPs but also brings new vitality to traditional handicrafts and cultural heritage.

Figure 4. Porcelain tea set "xishan yuyi".

Figure 5. Theme decoration "bing xin tang" shaped as a folding fan.

3.3.2. Cross-industry collaboration in culture and tourism

China possesses abundant cultural and tourism resources, including natural landscapes, cultural landmarks, folk customs, traditional cuisines, historical heritage, handicrafts, and urban and rural scenery, among many other aspects. Integrating these resources into online games helps players gain a deeper understanding of the diversity of Chinese culture during their gaming experiences. This integration provides players with unique virtual tourism experiences and enriches the cultural content of the games. By incorporating these elements into the gameplay, not only can the games become more distinctive in terms of regional characteristics, but they can also convey more knowledge about Chinese culture to the players; this makes the game content more educational and academically valuable.

3.3.3. Promoting outward dissemination

Online games can transcend regions and geographical boundaries, enabling them to achieve global dissemination. This makes games a powerful tool for cultural

dissemination, transcending language and geographical limitations to convey cultural elements worldwide. The unique "flow experience" of gaming allows individuals to subtly perceive foreign cultures [14], enriching auditory and visual elements, and immersive interactions that enable players to fully immerse themselves in the game world. Furthermore, the narrative and continuity of games sustain this flow experience, creating favorable conditions for cultural dissemination.

4. Analysis of the pathways for the dissemination of traditional culture through online games

Online games, as a component of the wider concept of the metaverse, provide a powerful platform for the dissemination of outstanding traditional culture through the integration of multidimensional scenes. The dissemination of traditional culture through online games involves game developers exploring valuable cultural assets, creatively transforming and innovating cultural assets within the game, and ultimately conveying culture to the gaming audience. Therefore, in line with the inherent development patterns of games, it is essential to establish a systematic pathway for the dissemination of traditional culture through online games, from the perspective of cultural resources, game content, and audience (as shown in **Figure 6**).
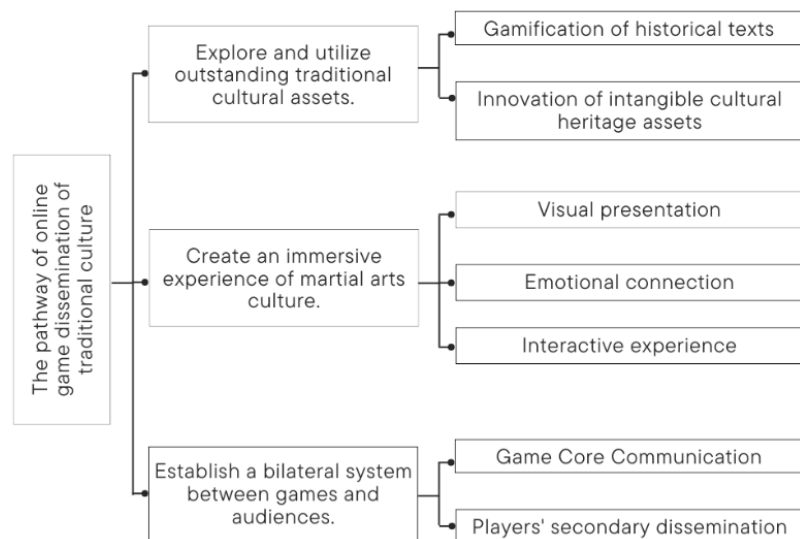

Figure 6. Pathway of traditional culture dissemination in online games.

4.1. Exploring and utilizing outstanding traditional cultural assets

The rich traditional cultural assets in China provide abundant creative resources for online games. These include various cultural elements such as nature, history, and customs, offering an extensive creative space for the game's story background, character design, and plot arrangement.

4.1.1. The gamification of historical texts

The term "gamification" has a broad meaning and is not limited to "turning non-game things (or work) into games" [15] and "applying game design principles, loyalty programs, and behavioral economics to encourage interaction and

engagement" [16]. In this context, it refers to the integration of learning historical texts into the mechanics of games to achieve better dissemination effects. Online games provide a more concrete platform for this approach, allowing players to learn history within the game, absorb cultural values more effectively, and gain a deeper understanding and appreciation of traditional culture. This gamified dissemination method not only attracts the participation of the younger generation but also sparks interest in traditional culture among more people, promoting the inheritance and development of traditional culture.

4.1.2. The innovation of intangible cultural heritage assets

Intangible cultural heritage serves as a significant symbol of a nation's and a people's historical and cultural achievements, constituting a vital component of outstanding traditional culture. In the process of disseminating traditional culture, online games should prioritize the creative transformation and innovative development of intangible cultural heritage. For instance, concerning folk crafts or regional arts, the interactivity and immersive experience can provide online games with new spirit, making them more vivid, enjoyable, understandable, and communicable. Regarding dramas and traditional operas, games can integrate intangible cultural heritage through storylines, character development, and game mechanics, allowing players to experience and appreciate the charm of traditional culture within the game. Through innovative design and interactive experiences, online games have the potential to breathe new life into intangible cultural heritage, enabling broader dissemination and recognition in the digital age.

4.2. Creation of an immersive cultural experience environment

Creating an immersive cultural experience environment and enhancing player engagement through various interactive methods are important approaches to attract audiences to actively accept and learn about culture.

4.2.1. Visual presentation

Utilizing the media forms of games as the means of manifestation entails the methods by which heritage information is conveyed to players, enriching how this information is presented within the game. It encompasses graphical, aural, and mechanical means. Graphical manifestation employs visual elements such as photographs or graphics; aural manifestation utilizes sound effects and music; and mechanical manifestation occurs through the game's mechanics and player interactions [17]. As taking a temple fair as an example, suppose that in an immersive cultural experience game, players are immersed in the ancient Chinese temple fair scene. The image design reproduces the splendid scene of the environment with swirling incense, colorful lanterns, and bustling crowds, forming a visually captivating cultural scenario. At this time, the game's melodious guqin music, lively folk music, and the hustle and bustle of people, reproduced through sound effects, recreate the real atmosphere of the temple fair. Such a fusion of sight and sound enhances the player's sense of immersion, laying the foundation for understanding the continuity of song and dance activities and traditions in the temple fair, as well as their relevance to the lives of ordinary people.

In the future, online games can introduce more traditional customs or festivals

that the audience may not be so familiar with. Video games that incorporate historical elements into their narrative, theme, or setting offer a unique opportunity for experiential learning. Their interactive nature allows players to immerse themselves in the past, facilitating a deeper and broader understanding of historical contexts. This immersive experience can enhance players' comprehension of historical events and cultures [18], providing a more engaging and interactive way to learn about the past. Through the design of sound effects, images, and interactivity in the game, they can first attract the audience's attention and then use the method of combining education with entertainment to immerse players in the atmosphere of traditional culture. Integrating with contemporary trends, developing original activities based on traditional culture, and providing a platform for the audience to understand the contemporary significance of historical heritage and deepen their understanding of Chinese traditional culture. However, it is important to note in game development that the creative transformation of cultural resources must adhere to facts. When developers engage in scene design, they should focus on investigating and researching the cultural background.

4.2.2. Emotional connection

In terms of gaming, establishing an emotional connection between players and game content is a crucial factor in information dissemination. Enhancing the gaming experience and providing players with sensorial rich, emotionally coherent, and cognitively stimulating experiences allow them to deeply connect with traditional culture on emotional and intellectual levels.

For example, in online gaming, non-player characters (NPCs) serve as key interactive elements between players and the game world. Games featuring a 'people-centered' design often incorporate mechanisms to enhance collaboration, dialog, and relationship development between players and nonplayer characters (NPCs). This feature system enables players to make meaningful choices that impact not only the game world and its inhabitants but also foster a sense of agency and empathy among players [19]. By integrating mechanics that require communication, negotiation, and occasionally compromise, these games effectively mirror real-world social interactions [20]. This approach enriches the gaming experience by infusing it with the authenticity and depth of interpersonal connections, thus underscoring the profound impact of 'people-centered' design in creating engaging and meaningful gaming experiences [15], making their design particularly important. Game designers not only need to provide clear story backgrounds but also need to stimulate players to establish emotional connections with NPCs through carefully crafted and engaging character settings and emotional expressions. Through interaction with NPCs in the game, players may resonate emotionally with traditional culture, experiencing a sense of belonging. Through emotional connections, players are more likely to immerse themselves in the world of traditional culture, gaining a deeper understanding, experience, and acceptance of its essence, thus achieving the positive inheritance and dissemination of traditional culture.

4.2.3. Interactive experience

With the development of the Internet and technological applications, embodied communication is emerging as an interactive relationship between individuals and

medium, as well as technology [8]. In online gaming, users take on digital identities and inhabit diverse spaces where they can socialize and trade, similar to the real world. The integration of technology into the body enables human-machine integration, with the body connecting to virtual environments, demonstrating characteristics of embodied communication. By incorporating interactive design and facilitating dynamic interactions between users and content—such as through touchscreens, virtual reality, and augmented reality technologies—users can experience the immediacy of embodied communication under the influence of technology. For example, in the game "Onmyoji," which combines Chinese mythology and folklore, players interact with various mystical creatures, deepening their understanding of the mysterious aspects of traditional Chinese culture. Through touchscreen and virtual reality technologies, players can directly participate in collecting and interacting with monsters in the game, enhancing both the entertainment and educational aspects of the game. This immersive experience makes users an integral part of the experience, thereby effectively attracting modern audiences and disseminating and preserving traditional culture.

4.3. Establish a dual communication system for games and audiences

Establishing a dual communication system between games and audiences is crucial. The potential impact of games on historical discourse and public memory depends on the subjective choices of designers and developers regarding specific variables (aesthetic forms) as well as the active participation of players in these textual frameworks (reapplied gaming practices) [17]. Whether games can achieve the benefits of cultural dissemination through their own advantages depends on both the development and utilization of game resources by designers and the participation of the audience in dissemination.

4.3.1. Game content dissemination

In game design, designers should fully recognize the communicative power of games and utilize clever planning and innovative design to make games powerful tools for the inheritance and development of traditional culture. Designers should customize game contexts and gameplay suitable for the dissemination of different cultural resources, allowing players to immerse themselves in the process of cultural dissemination. By designing a rich variety of tasks and challenges, players can be guided to gain a profound comprehension of the history, values, and artistic expressions of traditional culture, thereby achieving the goal of promoting traditional culture. In addition, domestic game designers should not only focus on the technical and entertainment aspects of the game itself but also actively promote Chinese traditional gaming culture. Considering "telling Chinese stories in a Chinese way" as one's important responsibility and mission in contemporary times, aiming to use online games as a medium for cultural inheritance and development.

4.3.2. Player secondary dissemination

A player's secondary creation is also an important way to spread culture through games. By creating content such as images, music, stories, or videos related to the game, players not only showcase their love and understanding of game culture but also attract more enthusiasts' attention and participation, forming a player-

centered cultural community. This bottom-up cultural dissemination method is more participatory and persuasive compared to traditional promotional methods.

Taking the game "Genshin Impact" as an example. "Genshin Impact" is an open-world role-playing game developed by miHoYo, and the character Yun Jin's personal PV, "The Divine Damsel's Relic" vigorously showcases Chinese traditional opera culture. As of December 2023, several videos created by players based on the PV have received millions of views, effectively promoting various Chinese traditional arts such as Peking opera, shadow puppetry, puppetry, martial arts, and folk music to players worldwide with modern pop elements. Consequently, under the premise of the game providing high-quality materials, players' autonomous dissemination has brought considerable exposure to the game and achieved certain communication benefits in terms of audience coverage and cross-border dissemination of traditional culture. This "dual dissemination" model reflects the multi-level communication ability of games as a medium and the role of players as important participants in cultural dissemination.

5. Conclusion

In accordance with the development of the times, online games possess diverse advantages and systematic dissemination pathways for propagating Chinese outstanding traditional culture. They offer beneficial ideas and methods for disseminating Chinese traditional culture and constructing a Chinese narrative system in the new media era. As content designers with a sense of responsibility for the era, it is essential to integrate cultural development into game development and continuously explore new forms of combining traditional culture with online games in practice. While this study focuses on online games as a whole, further research could delve into different subtypes within this category. The more detailed differences among them would lead to specific design methods and dissemination approaches. Therefore, it is worth looking forward to more research space for exploring the dissemination pathways of traditional culture in different types of online games. Video games offer an effective means of engaging with various subjects, offering valuable perspectives on specific cultures or locations. Through the utilization of video games to evaluate the social significance of cultural heritage sites, we can enhance our comprehension of the site's significance to both the local populace and the broader society.

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