

Research on Communication Pathways of Digital Games in Social Media Environments

Peiran Tian

Communication Leadership, University of Washington Seattle, Seattle, America
tian312@uw.edu

Abstract. Against the backdrop of the rapid development of artificial intelligence technology, the deep integration of global social media platforms, and the enhanced autonomous expression of users, the dissemination form and operational logic of digital games are undergoing systematic changes. The rapid expansion of emerging media forms such as short videos, live streaming, AIGC, virtual hosts, and cross-cultural communication has enabled games to no longer rely solely on traditional channels for dissemination but to be deeply embedded in algorithmic recommendation mechanisms and creator-driven content ecosystems. Based on this, this study combines content analysis, multimodal discourse analysis, social network analysis, and public opinion ecology research to reconstruct the game dissemination model and reveal how games can maintain their vitality in the algorithmic era, the creator era, and the era of cultural integration. The research finds that digital games are transforming from entertainment products into a composite form of "cultural carrier, emotional space, and social platform." Meanwhile, the new form of dissemination through AIGC has ushered in a new era of human-machine coordination in communication. This paper contributes to a deeper understanding of the evolution of digital game dissemination mechanisms and provides a reference for cultural studies in the context of new media.

Keywords: Digital games, AIGC, Cross-cultural communication, Game communication model

1. Introduction

With the rapid development of mobile internet, social media platforms, and artificial intelligence technology, digital games have transformed from simple entertainment products into comprehensive digital media that integrate cultural expression, technological application, and social interaction. This article focuses on analyzing how digital media specifically combine cultural expression and player psychology with design, evolving from a single focus on game design research and development to a multi-faceted integration of game culture, mechanisms, and algorithms. The progress of this integration is the main theme of this article. Although game design now has relatively good game mechanics and technology, it has not yet formed a mature system in cross-platform dissemination, gamer psychology, and AIGC. This article takes the dissemination path of digital games in the social media environment as the research object and focuses on the following

issues: First, how do platform algorithms and social media mechanisms reshape the dissemination logic of digital games; second, what are the differences in dissemination methods and survival strategies among different types of digital games; third, how do the psychological and behavioral characteristics of Generation Z and Generation Alpha users affect the dissemination effect of games; fourth, what impact do artificial intelligence and user co-creation models have on game promotion and cultural dissemination? The essential purpose of this research is to enable more players to have a better gaming experience through the participation of algorithms and AI, and to explore how games can better adapt to the development of future technological media in cross-cultural communication, providing some possible directions for the future development path.

2. Prevailing game genres in the current landscape of digital and societal evolution

With the deepening of mobile Internet and the application of artificial intelligence technology, the production and dissemination models of digital games have undergone significant changes. Fragmented dissemination forms represented by short-video platforms have reshaped the dissemination paths and user participation methods of digital games. Against this backdrop, different types of digital games have exhibited differentiated dissemination characteristics.

2.1. Mobile-dominant products (short video-driven games)

Mobile-led products refer to digital game types that mainly use mobile terminals as their primary platform and are highly dependent on algorithmic recommendations from short-video platforms and user-generated secondary creations during the process of user acquisition and dissemination. Representative games of this type include "Genshin Impact," "Identity V," and "SKY." The core audience of this category of games is mainly composed of Generation Z and Alpha generation users. As information becomes more open and transparent, the trend of using short video platforms as information transmission carriers will intensify [1].

With the increase in young people's demand for fast-paced and fragmented content, game-related content has achieved high-frequency dissemination through short video editing, display of exciting clips and emotional narration, significantly enhancing the exposure and dissemination efficiency of games. The popularization of artificial intelligence-generated content (AIGC) technology has further lowered the threshold for secondary creation, allowing players to have direct conversations with game content and platforms, thereby promoting the explosive spread of game content on social media platforms.

In addition, the form of game live streaming is also showing a trend of miniaturization and fragmentation, lowering the threshold for user participation, enhancing interactivity, and making game content more closely related to life. Overall, this type of game has built a user-participation-centered communication ecosystem through the deep integration with short-video platforms, AIGC technology, and mobile live streaming forms, and has become one of the important types of digital game communication at present.

2.2. PC/console ecosystem (deep immersion and cultural symbolism)

The PC/console hardcore ecosystem mainly refers to digital game types that take PC or console platforms as the core carriers and target highly engaged and immersive player groups. Representative games include World of Warcraft, CS:GO, and Black Myth: Wukong. Such games typically have high technical barriers, long playtimes, and complex system designs. They demand

high levels of player investment and loyalty, emphasizing immersive experiences and deep participation.

From the perspective of dissemination channels, the development of the e-sports industry and the global expansion of digital distribution platforms such as Steam have provided relatively stable and long-term channels for the dissemination of this type of game. Through professional competitions, live-streaming platforms, and professional commentary content, hardcore games not only maintain their popularity among core player groups but also gradually enter the broader public view. At the same time, narrative-oriented single-player and console games are gradually attracting the attention of younger players. Through the construction of a complete worldview, plot narration, and character shaping, they provide players with emotional release and meaningful experience, becoming an important medium for them to express personal taste and cultural identity. Technological advancements have revolutionized video games and enabled them to be well integrated with immersive stories [2]. Overall, games in the PC/console hardcore ecosystem have evolved from mere entertainment products to digital cultural carriers that possess competitive value, narrative depth, and cultural significance.

2.3. Emerging technology-driven entities (AI-integrated, user-generated content-oriented, and virtual socialization)

Emerging technology-driven games refer to a category of games that highly rely on new technologies in the process of content generation and dissemination. Represented by games like "Minecraft", "Roblox", and various AI mini-games, these games no longer have their content production completely dominated by the official side but are presented in an open form to players. With the development of artificial intelligence-generated content (AIGC) technology, maps, characters, and plots can be automatically generated by algorithms, lowering the threshold for creation and enhancing the ability to continuously update game content. Driven by social development trends, these games are gradually integrated with different scenarios, allowing players to independently expand the breadth of the game and form new forms represented by AI educational sandboxes. At the same time, through long-term stable server and community mechanisms, these games have evolved into "virtual communities" and "digital social venues" with social functions, where players not only play games but also establish social relationships and identities. Through the official UGC creation platform, players can create various UGC with their imagination and creativity, like unique game levels with higher playability and different gaming experiences [3].

At the level of dissemination, emerging technology-driven games mainly rely on player creation rather than official promotion for their spread. With the maturation of the creator economy, players have become the core force in game dissemination by creating maps, mods, and related content. Overall, these games, based on AI technology and user co-creation, have formed a dissemination model characterized by community participation and long-term interaction, representing an important direction in the development of digital games.

3. The survival strategy of digital gaming

3.1. Analysis of the gaming ecosystem: a three-tiered structure of platform, technology, and user

3.1.1. Algorithm-driven communication ecosystems in digital platforms

In the new era of social media, the dissemination of digital games is largely influenced by the algorithmic recommendation mechanisms of platforms. Platforms such as Douyin, YouTube, X, and Bilibili analyze data based on users' browsing, interaction, and dwell behaviors to screen and distribute game-related content, thus becoming a crucial factor in determining the exposure of games.

Due to the fact that platform algorithms usually prioritize recommending content with strong emotional appeal and interaction potential, the dissemination of games has gradually exhibited the feature of revolving around "emotional topic positions." Intense and thrilling operation scenes and plot segments with emotional tension are more likely to be recommended, thereby enhancing the dissemination effect. This reflects the advantage of short-video platforms, which can expose and spread games more quickly and intensively to achieve the purpose and effect of dissemination.

3.1.2. Technological innovation reshapes communication modalities

The development of new technologies is continuously transforming the way digital games are disseminated. Artificial intelligence technology is being applied to the automatic editing and generation of game content, enabling the rapid production and dissemination of game highlights, lowering the threshold for content creation and enhancing the efficiency of dissemination. As a result, more ordinary players are able to participate in the production and sharing of game content. Meanwhile, virtual hosts are gradually becoming important figures in game dissemination. By interacting with audiences through virtual avatars, they have played a significant role in the initial release and trial play dissemination of games, enhancing the audience's sense of participation and immersive experience. Additionally, the advancement of AR and VR technologies has led to the emergence of immersive dissemination forms. With the aid of these technologies, game experiences can be presented more intuitively, and players are more willing to participate in dissemination through sharing their experiences. The VRChat community's experimentation with AI-driven game mechanics reflects a broader trend toward dynamic, adaptive systems in virtual environments [4].

Overall, the application of artificial intelligence, virtual anchors, and immersive technologies has made the dissemination methods of digital games more diverse and experiential.

3.1.3. Audience profiling: trends in gaming behavior across Generations Z and Alpha

As we kick off 2026, we're scaling our advertising platform with new formats and tools designed to solidify Roblox as an essential channel where brands can measure results and build authentic, lasting connections with Gen Z and Gen Alpha users [5]. In the gaming environment dominated by Generation Z and Generation Alpha, emotional value is gradually becoming a more sought-after value in games. Young players tend to view games as a medium for emotional regulation and psychological relaxation rather than merely as competitive tools. They prefer light social and non-confrontational gaming experiences that emphasize a sense of companionship and low-pressure interaction. Young people have different demands for games, making it even more necessary for games to evolve.

With the continuous expansion of the participation of diverse groups, the audience structure of digital games has become more open and inclusive. The continuous increase in the proportion of female players, the frequent cross-cultural player exchanges, and the enhanced visibility of the LGBTQ+ community in the gaming space have made games an important digital space for identity expression and social interaction. The cross-cultural dissemination of games through cross-cultural communication enhances their cultural exchange value and playability, thereby increasing the number of cross-regional players.

3.2. Analysis of promotional strategies: innovations in communication paradigms in the era of artificial intelligence

3.2.1. Transition from official propaganda to user-driven publicity

Driven by AI technology and social media platforms, users have gradually become important subjects in the dissemination of games. With the continuous increase in the proportion of UGC secondary creation content, players are no longer just passive recipients of official information, but actively participate in the dissemination of games through editing, re-creation and sharing. In this process, they have gradually replaced the traditional promotional role and become the core dissemination force promoting the spread of games, thanks to their authenticity and community influence. Creators have audiences, and audiences mean eyeballs — so, as creators settle into the second tier of UGC platforms, advertisers are naturally following [6].

3.2.2. Multimodal communication has become the dominant paradigm

In the communication environment of the AI era, digital games are gradually adopting multimodal communication methods, diffusing through various content forms such as PVs, live demonstrations, live testings, and virtual streamers' gameplay. Different media forms work together, enabling game information to reach the audience from visual, auditory, and interactive aspects, enhancing the communication effect. In the process of digital game communication, globalization and localization are gradually becoming the mainstream. Games enhance cultural recognition by integrating the worldview with specific regional cultural elements, thereby attracting the attention of global audiences.

3.3. The cultural extension of transmission mechanisms: toward the "games as culture" trend

As game content spreads and is re-created on social media, games have gradually transformed from entertainment products into digital cultural carriers that carry narratives, values, and identity recognition, presenting a trend of "games as culture." Some games, through world-building and interactive narratives, convert specific cultural content into digital texts that can be experienced, promoting the global dissemination of culture. For instance, "Black Myth: Wukong" takes Chinese mythology as its narrative foundation, drawing international players' attention to traditional Chinese culture and transmitting cultural values in the process of game dissemination, making games a platform for cultural transmission.

4. Future development direction: digital game dissemination trends for 2027–2035

4.1. Intercultural communication: pathways to deepening global cultural integration

4.1.1. Global articulation of localized narratives

In the future development of digital games, cross-cultural communication will become one of the important trends. Among them, "global expression of localized narratives" will be a key path, that is, while retaining the characteristics of regional culture, presenting the narrative in a way that is easier for global players to understand and accept. For example, Chinese games achieve the international dissemination of traditional culture by combining traditional Chinese elements with universal game mechanisms and game narratives.

4.1.2. Video games as an emerging medium for international communication

With the increasing influence of digital game culture, games have gradually become one of the important media for international communication. By integrating cultural narratives, visual styles and interactive experiences, games can achieve the output of national cultural brands in a more approachable and engaging way. Under this trend, digital games are transforming from entertainment products into important tools for connecting cultural dissemination and international exchanges. At the same time, driven by the development of AI, it is easier to break language barriers, helping more users fully understand and enjoy games of different languages and cultures, and enhancing cultural impressions and brand value.

4.2. Technology convergence trend: evolving game communication paradigms in the age of artificial intelligence

Artificial intelligence-generated content (AIGC) is gradually deeply involved in the content production and dissemination process of digital games. On the one hand, players have begun to widely use AI tools for game promotion and secondary creation, such as generating promotional copy, editing videos and visual content, significantly lowering the threshold for creation and expanding the scope of user participation. On the other hand, AI is gradually capable of independently generating and disseminating content, automatically producing game clips, commentaries, interpretations and analysis videos, making game dissemination exhibit characteristics of scale and automation.

4.3. Data-driven gaming ecosystem

Against the backdrop of the continuous development of data technology, digital games have gradually formed a communication and operation ecosystem centered on data analysis. By continuously collecting and analyzing player behavior data through big data statistics, games can predict user preferences and behavior trends, providing a basis for content design and communication strategies. In this process, the content and demands of user portraits are constantly improved, further optimizing the game's communication path and opening the door to new gaming environments and unique personalized gaming experiences.

5. Conclusion

In the era of new digital media, digital games have taken on new directions of development. By deeply integrating culture, technology, and society, they have created works that better align with the current trends of the times. Social media has also enriched the core of the game world and improved the underlying logic of games. More and more games are evolving from single content to diversified content and further moving towards a human-machine co-creation model supported by AI technology. Against this backdrop, the future development of games will increasingly rely on the collaborative integration of cross-culture, cross-platform and cross-technology. Digital games are no longer merely entertainment products but are gradually evolving into comprehensive digital spaces that carry cultural expression, emotional regulation and social interaction. In the future, the game world will also be combined with newer technologies, integrating digital media and society for common development.

References

- [1] Cheng, X., Su, X., Yang, B., et al. (2023) Understanding users' negative emotions and continuous usage intention in short video platforms. *Electronic Commerce Research and Applications*, 58: 101244.
- [2] Lu, A. S. (2012) Story immersion of video games for youth: A latent growth curve analysis. *Cyberpsychology, Behavior, and Social Networking*, 15(10): 547–553.
- [3] Duan, H., Huang, Y., Zhao, Y., et al. (2022) User-Generated Content and Editors in Video Games: Survey and Vision. in *Proc. IEEE Conf. on Games (CoG)*.
- [4] Spronck, P., Ponsen, M., Sprinkhuizen-Kuyper, I., and Postma, E. (2006) Adaptive game AI with dynamic scripting. *Machine Learning*, 63: 217–248.
- [5] Roblox Corporation. (2023) Roblox economic impact and social benefit study. <https://corp.roblox.com>
- [6] Kou, Y., & Gui, X. (2023) Harmful Design in the Metaverse and How to Mitigate It: A Case Study of User-Generated Virtual Worlds on Roblox. *DIS '23*.