

Original Research Article

From "viewing the scenery" to "telling stories": The immersive transformation and dissemination of scenic area cultural symbols through the "Mystery Realm" APP

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Abstract: This paper, within the context of digital cultural inheritance and dissemination, takes the "Mystery Realm" app as its research object to explore how it transforms and disseminates scenic area cultural symbols through immersive narrative design. The study focuses on users' cultural symbol recognition, emotional resonance, and dissemination behavior during immersive experiences, evaluating the app's effectiveness in cultural symbol recognition, user immersion experience, and interactive dissemination behavior. Using multidimensional data collection and analysis, it summarizes the app's dissemination modes, emotional resonance, and dissemination behavior from the perspectives of cultural memory mining and interactive behavior feedback. The "Mystery Realm" app, through contextualized narrative, interactive tasks, and multi-sensory symbol presentation, effectively transforms the static act of "viewing scenery" into a dynamic act of "storytelling," significantly enhancing users' perception of scenic area cultural symbols and their willingness to disseminate them. This paper, from the perspectives of cultural studies, semiotics, and communication studies, summarizes its immersive transformation mechanism and provides theoretical insights and practical pathways for digital cultural dissemination.

Keywords: immersive experience; scenic area cultural symbols; narrative communication; digital transformation; user participation

1. Introduction

In today's world, where digital technology is deeply embedded in daily life, the dissemination of cultural heritage and scenic area culture is undergoing a paradigm shift from one-way display to two-way interaction. Traditionally, tourists' acceptance of scenic area culture has largely remained at the level of sightseeing, where cultural symbols are often simplified into visual labels, failing to evoke deep emotional resonance or internalize memories. However, in recent years, the rise of immersive narratives and interactive design has provided new possibilities for cultural dissemination: Users are no longer bystanders of culture, but rather participants in the story and even co-creators.

The "Mystery Realm" app, an immersive interactive application centered on scenic area cultural symbols, attempts to transform local history and culture into a participatory and interpretable digital narrative space through contextualized tasks, symbolic puzzle-solving, and multi-sensory experiences. The core of research on the digital inheritance and dissemination of culture lies in how to achieve the digital transformation and effective dissemination of symbolic cultural connotations while respecting the core of the culture. This transformation involves not only the extraction and reproduction of symbols but also the optimization of dissemination methods and the enhancement of the audience experience.

The current research questions are: How does this app achieve the leap from "display" to "transformation" of cultural symbols? How do users identify, understand, and disseminate these symbols in an immersive experience? What implications does this dissemination model have for cultural inheritance in the digital age? Previous studies have mostly focused on technology or effect evaluation. This paper, based on the theoretical framework of current immersive narrative models and using situational narrative as a foundation, proposes a mechanism for inheritance and dissemination that integrates technology-driven approaches and user feedback, targeting cultural symbol recognition and audience interaction behavior. Furthermore, it emphasizes an in-depth interpretation of the meaning generation of cultural symbols, user experience narratives, and emotional dynamics in dissemination. Through qualitative interviews, text analysis, and

a small-scale questionnaire survey, this paper reveals the mechanism by which the "Mystery Realm" app functions in the chain of "cultural symbols → immersive experience → dissemination behavior," and provides a humanistic perspective framework for understanding digital dissemination in scenic areas.

2. Design concept and symbolic transformation of the "Mystery Realm" App

2.1. From "Seeing" to "Performing": A narrative shift in design concepts

In the dissemination of local historical and cultural resources, the identification and application of cultural symbols play a key role. As a highly abstract and condensed carrier, cultural symbols can clarify the connotation and attributes of regional culture, and at the same time promote information sharing and knowledge construction between culture and social members. The symbolization process not only includes the extraction and transformation of cultural symbols, but also requires the construction of an interactive environment that can be dynamically disseminated, so as to maximize the effect of cultural dissemination. Studies have found that cultural symbols can quickly establish cultural cognition and identity, and extend their influence space through multi-channel and multi-media dissemination forms. For example, traditional architectural styles, clothing patterns, and language rhythms have become representative elements of local culture, and while carrying the core of local spirit, they have been introduced into modern communication fields such as visual design and spatial planning ^[1]. In recent years, with the development of digital and intelligent technologies, the carriers and media forms of cultural dissemination have shown diversified characteristics. For example, digital APPs and virtual reality environments can strengthen the dynamic application of cultural symbols, provide users with an immersive experience, and promote users' deep understanding and memory of cultural symbols ^[1].

For digital platforms, the extraction and transformation of cultural symbols is not only the foundation of content design, but also related to the long-term development potential of the platform in cultural dissemination. Taking the "Mystery" APP as an example, it uses data mining and artificial intelligence recognition technology to accurately extract the core cultural symbols of the scenic spot. At the same time, in the transformation design, it combines image processing and interactive model construction to enhance the visual and functional appeal and interactivity of cultural symbols. This process is based on the theory of semiotics to deeply explore the cultural core, and completes the upgrade of symbol functions through refined symbol design and real-time symbol dissemination platform. Using symbols as a bridge for dissemination, users can enhance their perception of cultural value in immersive interactive scenarios, and further expand the depth and breadth of cultural dissemination through personalized interactive behavior ^[1-2]. Therefore, the accurate extraction and transformation design of cultural symbols is not only a technological innovation, but also an important means of conveying local cultural values and enhancing public cultural identity.

2.2. Extraction and coding of cultural symbols in scenic areas

The extraction of cultural symbols in scenic areas is not a simple listing, but rather based on an understanding of the deep structure of local culture. Utilizing a multi-layered and multi-faceted theoretical framework, the study unfolds from three dimensions: The identifiability, representativeness, and dissemination of cultural symbols. Based on regional cultural characteristics, the research selects three core categories of symbols that represent the cultural connotations of specific scenic areas: Material symbols (such as ancient architectural components and inscription patterns), behavioral symbols (such as traditional rituals and festival customs), and conceptual symbols (such as local legends and values). These symbols do not exist in isolation, but are woven into an interconnected network of meaning through narrative threads.

During the transformation process, the design team adopted a "re-encoding" strategy: Transforming the discourse system originally belonging to history and folklore into an interactive language that users can perceive and operate. For example, the architectural term "mortise and tenon structure" was designed as a puzzle game, and the legend of "water god worship" was transformed into a task chain to find missing sacrificial artifacts. This transformation not only retains the core semantics of cultural symbols but also endows them with contemporary interactive forms, allowing users to naturally complete cultural cognition while "playing".

In order to enhance the adaptability of cultural symbols to dissemination, we transform cultural symbols with visual communication as the theoretical background, analyze the emotional and cognitive

correlation between symbols, and generate symbol presentation forms that are adapted to electronic media and digital platforms. Finally, the cultural symbols verified by the experiment have high user recognition and dissemination potential, which can further support the design optimization of immersive experience. This full-chain method from symbol mining to dissemination adaptation not only provides an innovative path for the study of cultural symbols in scenic spots, but also deepens the breadth and depth of cultural dissemination, and has significant theoretical and application value ^[3].

3. The triple leap of users in cultural dissemination

3.1. The shift in symbolic cognition: From "seeing" to "understanding"

The interviews revealed that before using the "Mystery Realm" app, most users' understanding of the cultural symbols in scenic areas was limited to a superficial level of "having heard of them" or "having seen them but not knowing their meaning." However, after a series of immersive tasks, the vast majority of people were able to clearly describe the appearance, name, and stories behind at least three cultural symbols.

This change doesn't stem from simple repetitive viewing, but rather from the clever embedding of symbols within the task's logic—Users must actively observe, compare, and reason to advance the plot. This "cognitive labor" elevates symbols from a vague background to a clear focus, transforming them from part of the environment into objects to be understood and remembered. From a semiotic perspective, this is precisely the process of continuously strengthening the semantic connection between the "signifier" and the "signified."

3.2. The generation of immersion: The interweaving of narrative, senses, and choice

The immersive experience is the most praised feature of the "Mystery Realm" app. Users "forget about time" and feel "truly immersed in the story." This feeling is not accidental but stems from the organic combination of three design strategies: First, narrative coherence, with tasks seamlessly connected through plot, avoiding any sense of discontinuity; second, multi-sensory triggering, where the app uses background sound effects, vibration feedback, and voice guidance to create atmosphere in addition to visual presentation. For example, in the tomb exploration scene, the eerie background music and occasional vibrations involuntarily heighten the user's tension; and third, granting users a degree of autonomy. Although the overall plot is linear, users can decide on details—Such as which puzzle to solve first or which NPC to talk to—This "limited freedom" greatly enhances immersion. It's worth noting that the immersion is not evenly distributed but peaks at certain "highlight moments," such as obtaining a key item after solving a complex puzzle or discovering that one's initial assumptions were wrong during a plot twist. These moments are often where users are most emotionally invested and most willing to share them afterward.

3.3. The elevation of communication: From sharing experiences to co-creating culture

Users' dissemination behavior exhibits a clear hierarchical progression. The most basic level is "check-in" style sharing, such as taking a screenshot and posting it on WeChat Moments; the middle level is recommending it to friends or trying it out with friends; and the highest level of dissemination involves users creating secondary works on cultural symbols, such as writing fan fiction, making explanatory videos, and discussing plot details in the community.

Text analysis reveals frequent expressions like "Oh, I see," "That's so interesting," and "I'll bring my friends again" in user-generated content, reflecting a positive correlation between emotional arousal and willingness to act. Furthermore, some users indicated that after using the app, they proactively researched relevant historical documents or revisited the sites, extending their online experience to offline practice. This phenomenon confirms the core concept of "participatory culture": When users are no longer passive consumers of culture but co-performers of the story, their dissemination behavior possesses greater spontaneity and creativity.

3.4. Immersive transformation: The interaction between narrative, symbols, and the body

The success of the "Enigma" app lies in its effective synergy between narrative, symbols, and the body. Narrative provides the framework for meaning, symbols act as carriers of meaning, and the body (through actions such as clicking, swiping, rotating the phone, and moving) becomes the medium for meaning generation. Merleau-Ponty's embodied cognition theory suggests that cognition is not purely a brain

activity, but is closely related to bodily actions. When users tilt their phones to see a symbol clearly or move closer to the speaker to hear a prompt, cultural information is not merely visually received, but rather a holistic engagement.

Compared to traditional guide apps or electronic maps, the unique feature of the "Mystery Realm" app lies in its transformation of cultural symbols from "information" to "props," from "being viewed" to "being used." This transformation aligns with the "experience-first" trend in contemporary cultural dissemination and provides new ideas for the living transmission of cultural heritage.

4. Conclusion

The "Mystery" APP has shown significant effects on the dissemination of scenic area cultural symbols in immersive experience, effectively realizing the modern reshaping of historical and cultural symbols and the innovation of dissemination mode. The APP replaces "viewing scenery" with "acting out stories", providing a feasible path for the immersive transformation and dissemination of scenic area cultural symbols. Through narrative design, symbol recoding and interactive participation, it transforms users from bystanders to participants and from consumers to disseminators. At the same time, the feedback interaction design of the cultural memory mining module expands the interpretation dimension of historical and cultural content, and the high feedback of users shows the key role of "subjective participation" in building cultural consensus. This practice path has fully reflected the precision characteristics of the information symmetry model, thereby promoting the synchronization of public cognitive ability of cultural symbols^[15]. This model not only enhances the depth and breadth of cultural dissemination, but also redefines the way of "experiencing culture" in the digital age.

For scenic area promotion, this means that digital tools should not be regarded as mere display windows, but as story engines. For cultural communication research, this reminds us to pay attention to users' embodied experience and emotional motivation, rather than just focusing on the efficiency of information transmission. Under the mechanism of user cultural memory storage and regeneration, we should explore appropriate commercialization transformation paths for cultural products to support the innovation of urban cultural industries^[14]. When culture can be "performed", memory is no longer a burden, but becomes an enjoyment.

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