

ISSN electrynico: 2172-9077

DOI: 10.48047/fjc.29.01.21

EVALUATING THE DESIGN VALUE OF WUHU WESTERN-STYLE CULTURAL PARK: THE ROLE OF DIGITAL MEDIA IN PUBLIC ENGAGEMENT AND COMMUNICATION

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Fecha de recepciyn de la reseca: 01 March 2025

Fecha de aceptaciyn definitiva: 03 April 2025

Abstract

This study investigates the role of digital media in enhancing public engagement and communication within Wuhu Western-Style Cultural Park, a unique heritage site blending Western and Chinese architectural traditions. The research employs a qualitative approach, combining a Systematic Literature Review (SLR) guided by the PRISMA framework and a comparative case study method. Eight key studies were selected from an initial pool of forty, focusing on digital engagement strategies in cultural heritage contexts. The research critically evaluates the application of augmented reality (AR), virtual reality (VR), mobile applications, social media, and gamification in enhancing visitor interaction. Comparative insights were drawn from Suzhou Garden and Guangzhou Cultural Park, highlighting diverse digital engagement approaches. Findings indicate that immersive technologies like AR and VR effectively transform visitor interaction from one-way to two-way communication, enhancing historical interpretation and experiential learning. Social media platforms foster participatory engagement, extending interaction beyond physical visits, while gamification encourages deeper cultural involvement through interactive challenges. However, challenges related to technological accessibility, digital literacy, infrastructure, and generational gaps persist. The research integrates Uses and Gratifications Theory and Media Ecology, offering a critical lens to understand visitor motivations and the dynamics of digital

communication ecosystems The study provides practical insights for cultural heritage managers, urban planners, and policymakers. It emphasizes the need for inclusive, sustainable digital strategies that enhance engagement while maintaining historical authenticity. Recommendations focus on improving accessibility, fostering participatory experiences, and ensuring the long-term viability of digital initiatives in cultural heritage settings.

Keywords: Digital Media, Cultural Heritage, Public Engagement, Visitor Experience, Augmented Reality.

1. INTRODUCTION

Cultural heritage parks are crucial in sustaining historical records, instilling cultural values, and engaging the public in history and architectural experience. China's cultural heritage parks have become critical sites to showcase national heritage by combining the old and the new in an effort to welcome local and foreign visitors. Cultural heritage parks have also grown over time, not only their focus on physical conservation but with the addition of interactive elements in an effort to reach more public (O'Donnell, 2017). Convergence of new media has changed visitor engagement with, and experience of, cultural heritage, opening the door to novel possibilities for immersive and interactive engagement. Wuhu Western-Style Cultural Park is an exemplary case study in that it exemplifies the architectural blend of Western and Chinese styles, testifying to historical interactions and cross-cultural borrowing. Being a less explored cultural destination in digital media studies, the park offers worthwhile indications of how digital communication tactics can make tourists more fascinating (Chinadiscovery.com, 2025). As newer technologies like augmented reality, virtual reality, and mobile applications become more popular at heritage sites, it is essential to determine how these technologies influence visitor experience and perception at cultural parks like Wuhu.

The increasing role of digital media in cultural heritage environments has transformed the manner in which visitors engage, with real-time interaction enabled through web-based environments, computer-generated stories, and virtual reality. Digital technologies not only connect with wider audiences but also offer means for individuals to interact with heritage remotely (King, Stark, & Cooke, 2016). An understanding of how individuals are accessed with cultural parks via digital media is crucial for creating strategies that foster participation, retention of knowledge, and respect for historical narratives. These interactive technologies establish active communication channels between publics and cultural institutions by allowing instant feedback, cooperative content generation, and continuous dialogue. In particular, social media platforms enable two-way communication, where visitors can share experiences and perceptions, and institutions get instant feedback as well as establish continuous relationships with their audience. Equally, digital storytelling closes the gap between heritage information and visitor emotions, allowing institutions to convey stories of heritage more humanly and attractively (Robin, 2016). Such communicative approaches of interacting with visitors not only improve the visitor experience but also solidify the public's attachment to cultural heritage, promoting ongoing engagement beyond the site visit.

1.1. Research Problem and Rationale

As digital media have increased deployment in heritage sites, knowledge about how such technologies influence visitors' consciousness and participation remains vacant. Although several have studied digital technology's use in museums as well as in heritage tourism, few have ventured to study their

deployment in heritage parks, more so in China (Hijazi & Baharin, 2022; Navarrete, 2019). It is necessary to find out how digital platforms impact visitor experience, what kind of engagement is most effective, and how they foster more cultural heritage appreciation.

Wuhu Western-Style Cultural Park offers a platform to examine these dimensions by analyzing its digital engagement strategy and comparing it with other cultural parks. Through this, the research closes a knowledge gap in existing literature and adds to general arguments on how to utilize digital media for managing cultural heritage and conducting visitor studies.

Moreover, online interaction also provides two-way communication in heritage tourism through offering the means for uninterrupted interaction between tourists and heritage organizations. Using social media tools like WeChat, Weibo, and interactive mobile apps, cultural organizations are in a position to get real-time feedback from tourists, thus enabling them to respond in real time and adjust their communication approach based on tourist choice and preference (Richards, 2018). Such a two-way communicative connection also enhances the experiences of tourists as it invites co-creation and a sense of being a part of cultural narratives, while at the same time it allows institutions to gain visitor notice and cultural engagement.

By knowing how digital communication platforms affect visitor participation, cultural heritage destinations such as Wuhu Western-Style Cultural Park can use digital technologies strategically to counter prevailing challenges toward public participation. Hurdles such as lack of accessibility based on digital literacy gaps and technological infrastructure limitations become more evident in this two-way digital participation environment (Upadhyaya, 2024). These barriers need to be identified by cultural park managers and policymakers so that they know the context necessary to tackle challenges related to technological accessibility, digital illiteracy, and infrastructural constraints. Overcoming these barriers is important in order to provide inclusive participation and improve the quality and scope of cultural heritage experience through digital media.

1.2. Research Objectives

- To analyze the role of digital media tools, including augmented reality, virtual reality, social media, and digital storytelling, on visitor engagement and perception at Wuhu Western-Style Cultural Park.
- To examine the effectiveness of how digital media facilitate interactive communication in cultural parks.
- To compare design value of Wuhu's digital media engagement with other cultural parks, such as Suzhou Garden and Guangzhou Cultural Park, to identify best practices.

1.3. Research Questions

- How does digital media shape visitor perception and engagement at Wuhu Western-Style Cultural Park?
- What types of digital communication tools are most effective in enhancing visitor experiences?
- How does Wuhu's Western style digital engagement compare with other cultural parks in terms of effectiveness and visitor interaction?

1.4. Significance of Study

This study contributes to cultural heritage management, visitor research, and digital engagement studies by providing information on the role of digital media in shaping visitor interactions in heritage parks. The findings will guide cultural heritage managers, urban planners, and

polymakers in formulating strategies for public engagement through digital means. Besides, this research will also give practical recommendations on the integration of digital technology within cultural heritage sites in a manner that presents them as accessible, interactive, and effective in generating more meaningful links to histories. Understanding how visitors approach and act towards digital media will also assist in developing tailored engagement strategies aligned with prevailing trends in cultural tourism and heritage management.

2. LITERATURE REVIEW

2.1. Understanding Cultural Parks in China

Heritage parks are important places for the preservation of historical accounts, cultural understanding, and public education. Heritage parks in China have emerged as an important part of cultural heritage, representing China's rich historical traditions and rich architectural heritage. Heritage parks are constructed around historical sites, reconstructed heritage structures, and interactive exhibits that allow the visitor to become a part of cultural stories (Zhang, Li, & Hua, 2022). Historic preservation in cultural parks not only entails the preservation of physical assets but also the introduction of educational programs to enhance the understanding of the visitors. Wuhu Western-Style Cultural Park is the real representation of cultural heritage to depict the mingling of Westernization and Chinese conventions through architecture. The park in Anhui Province symbolizes an era of union between European style structures and something of local esthetics of the Chinese, imparting a traditional experience to tourists (Chinadiscovery.com, 2025). Unique from other heritage sites that primarily concern the preservation of ancient Chinese buildings, Wuhu Western-Style Cultural Park focuses on the historical interactions between China and the West. This thematic and architectural distinctiveness renders it an important case in exploring how digital media can encourage visitor engagement and interpretation of hybrid cultural landscapes.

2.2. Digital Media and Public Engagement in Cultural Heritage

As digital technology continues to advance so quickly, cultural heritage sites have embraced digital technologies to transform the visitor experience, increase accessibility, and encourage more public engagement. Digital technologies such as augmented reality, virtual reality, mobile apps, and social media initiatives have revolutionized the way people engage with cultural heritage, developing new sources of interpretation and interaction with historic places (Boboc et al., 2022). Visitors experience cultural parks through digital media frameworks which determine how park visitors perceive such places of interest. The historic reconstruction features of augmented reality allow visitors to view past scenes through interactive virtual overlays (Kelpšienė et al., 2023). Through virtual reality users can experience completely immersive visits to cultural heritage destinations from any location using their computer systems (Radice, 2014). Tourist accessibility to virtual guides through phone applications delivers multimedia cultural content with historical information alongside interactive destination maps for deepening visitor comprehension. Culture heritage sites enable engaged relationships as well as real-time encounters for social media users. WeChat, Weibo, and TikTok apps permit cultural heritage parks to share historical content for event marketing while involving visitors in preservation talks (Ge et al., 2024). Gamification measures in the form of online treasure hunting and interactive stories also lead to increased visitor involvement by transforming touring heritage into a participatory exercise. Online activities such as online visits to museums and live streaming of lectures by historians

have also become common ways of engaging visitor attention beyond attendance in person. Some of China's heritage sites have found it possible to integrate digital media successfully into visitor engagement strategies. Augmented reality, for instance, has been employed by the Forbidden City to provide virtual reconstructions of imperial palaces in order to enable individuals to experience the settings of the past from their mobile phones (Li, Nie, & Ye, 2022). Suzhou Garden has added location-based mobile-led tours of location-based stories with interactive capabilities, enhancing sensory engagement with Chinese garden beauty (Henderson, 2012). Similarly, Guangzhou Cultural Park utilized digital signage and QR code information points to provide instant access to historical documents (Ouyang et al., 2025). Such examples confirm the potential of digital media in terms of bridging preservation history with contemporary audience experience.

2.3. Communication Models

2.3.1. *Uses and Gratifications Theory*

Uses and Gratifications Theory explains the underlying motivations for how tourists utilize digital media in heritage parks. The theoretical framework proposes that tourists consciously utilize digital technologies like mobile apps, augmented reality, and gamification to satisfy specific needs of entertainment, learning, and social interaction (Mehrad & Tajer, 2016). Tourists in the context of cultural heritage sites, in this case exemplified by the Wuhu Western-Style Cultural Park, use the new technologies to acquire experiential past experiences, create enhanced understanding of the cultural heritage, and document the experience in social media sites. Knowing visitor motivations facilitates tailoring the digital experience to meet visitor needs and, as a result, increases visitors' engagement and retention in the cultural heritage travel business.

2.3.2. *Diffusion of Innovations Theory*

Diffusion of Innovations Theory analyzes the adoption of new digital communication technologies in cultural heritage places. Augmented reality, virtual tours, and interactive digital narration are innovations that are revolutionizing visitor experience. Adoption occurs through an S-curve, where early adopters initially embrace them, followed by increasing mainstream adoption (Dearing & Cox, 2018). Adoption is determined by perceived usefulness, ease of use, and social influence. For example, heritage parks using virtual reality tours have technologically advanced visitors adopt them quicker, while conventional tourists might need orientation. Identifying barriers and facilitators of adoption allows cultural managers to devise ways to make it more accessible and engaging to more people.

2.3.3. *Media Ecology*

Media Ecology analyzes digital sites as complex communication systems that have a profound impact on how visitors engage with and understand cultural heritage. It analyzes the co-presence and impact of different media—ranging from mobile apps to social media—on visitor experiences (Gensler et al., 2013). Digital media not only serve as carriers of information but also as interactive spaces, enabling real-time interaction with historical content. For example, augmented reality apps transform static presentations into dynamic stories, while social media enables ongoing conversations beyond physical visits. The interplay between these digital channels creates a multi-dimensional engagement system, enabling visitors to experience cultural spaces through interlinked digital channels, thus increasing appreciation for heritage and boosting the cultural park's global reach.

2.4. Digital Tools and Visitor Interaction

Digital technologies within cultural heritage parks both enhance one-way and two-way communication, which affects the interactions with visitors. One-way communication media, including digital screens, mobile-guided tours, and pre-recorded virtual tours, present formatted historical content, guaranteeing a standardized message (Falkheimer & Heide, 2014). Two-way communication, on the other hand, supports participatory interaction via social networks, gamification, and augmented reality (Falkheimer & Heide, 2014). WeChat and interactive museum applications allow visitors to contribute comments, pose questions, and collaborate on digital content. Comparing Wuhu Western-Style Cultural Park with parks such as Guangzhou Cultural Park illustrates how engagement strategies at sites differ, and how participatory digital storytelling enhances immersion and sustained visitor engagement.

2.5. Research Gap

Despite digital media becoming a part of cultural heritage parks, little is known about their effects on Chinese visitor perception and involvement. Despite investigations into using digital tools to help museums and archaeological sites utilize technologies, scant little has looked at their implementation for outdoor parks with heritage whereby space interaction remains relevant (Swensen & Nomeikaite, 2019). Additionally, the majority of existing research primarily emphasizes technological potential and less on assessing visitor experiences and notions of digital media within cultural contexts (Dinis et al., 2024). Case study-based research is necessary that specifically analyses how digital communication strategies influence visitor engagement in specific heritage parks. A case study of the Wuhu Western-Style Cultural Park provides a way to bridge this gap by examining the effectiveness of digital technologies for engagement and comparing them to others that cultural parks are utilizing. In addition, past studies have devoted little attention to theoretical models like the Uses and Gratifications Theory, which describes visitor motivations to use digital media, and the Diffusion of Innovations Theory, which discusses how digital communication technologies are used in heritage attractions. Likewise, the Media Ecology approach, where digital platforms are seen as interactive communication environments, is undertheorized. Further, comparative analysis in terms of how various digital means enable one-way and two-way communication in the case of visitors is lacking to affect levels of engagement and satisfaction. This study adds to a larger body of knowledge about how digital media increases cultural consciousness, accessibility, and visitor satisfaction in heritage spaces.

3. METHODOLOGY

3.1. Research Approach

This study employs a qualitative approach, with both Systematic Literature Review (SLR) and case studies utilized to analyze public engagement in cultural heritage parks in relation to the use of digital media. It is appropriate to employ a qualitative strategy as this allows the formulation of a complex understanding of visitors' experience, digital media initiatives, and public engagement trends in cultural heritage parks (Mohajan, 2018). Systematic Literature Review (SLR) incorporates present knowledge on digital engagement at heritage sites, focusing particularly on immersive technologies, mobile applications, social media advertising, and gamification. Case studies are applied in order to zoom in on three cultural heritage attractions—Wuhu Western-Style Cultural Park, Suzhou Garden, and Guangzhou

Cultural Park—to assess how digital media tools increase visitors’ involvement.

3.2. Case study Development

The case study approach enables an in-depth examination of how visitors engage with digital media tools across different cultural parks. This study focuses on three key aspects below to propose case studies keeping in view the research concern:

- Visitor Engagement – How digital platforms enhance visitor interaction, participation, and awareness of the cultural significance of the park.
- Digital Tools – The effectiveness of augmented reality (AR), virtual reality (VR), mobile applications, social media, and gamification in shaping visitor experiences.
- Comparative Digital Strategies – Identifying best practices and limitations in digital communication and engagement strategies across Wuhu Western-Style Cultural Park, Suzhou Garden, and Guangzhou Cultural Park.

3.3. Selection of Comparative Cases

For perspective, this paper provides a comparative case study of two other cultural heritage parks that have well-formulated digital media strategies for interactive communication with their audience. The parks were selected based on having implemented digital participation tools and significant cultural value.

- Suzhou Garden – A traditional Chinese heritage site that integrates digital storytelling and mobile applications to provide historical interpretation while preserving aesthetic authenticity.
- Guangzhou Cultural Park – A modern cultural park that emphasizes social media engagement, interactive digital installations, and gamification to create a highly participatory experience.

3.4. Systematic Literature Review Process and PRISMA Framework

The systematic Literature Review was conducted following the PRISMA framework to ensure a structured and transparent approach.

- Databases Searched: The literature search was performed across Scopus, Web of Science, JSTOR and Google Scholar, focusing on studies published between 2015-2025.
- Search Strategy: Boolean search techniques were applied with advanced filters for peer-reviewed studies. The following Table 1 summarizes the primary keywords and their combinations:

Table 1: Summary of Primary Keywords.

| Concept | Keywords |
|--------------------------|---|
| Digital Media | “digital media,” “digital tools,” “digital technology” |
| Cultural Heritage | “cultural heritage,” “heritage tourism,” “heritage parks” |
| Visitor Engagement | “visitor engagement,” “visitor interaction,” “public engagement” |
| Technologies | “augmented reality,” “virtual reality,” “social media,” “gamification” |
| Communication Strategies | “digital communication,” “interactive media,” “mobile applications” |
| Park-Specific Terms | “Wuhu Western-Style Cultural Park,” “Western-style heritage parks in China,” “Chinese cultural parks” |

3.4.1. Boolean Search Examples

Table 2 below illustrates the Boolean search examples.

Table 2: Boolean Search Strings.

| Search Focus | Boolean Search Strings |
|-------------------------------------|---|
| Digital Media and Engagement | “digital media” AND “cultural heritage” AND “visitor engagement” |
| Immersive Technologies | “augmented reality” OR “virtual reality” AND “heritage tourism” |
| Social Media and Visitor Experience | “social media” AND “heritage parks” AND “visitor experience” |
| Gamification in Heritage Context | “gamification” AND “digital interaction” AND “cultural sites” |
| Mobile Applications and Engagement | “mobile applications” AND “cultural engagement” AND “heritage management” |
| Park-Specific Search | “Wuhu Western-Style Cultural Park” AND “digital engagement” AND “visitor experience” |
| Comparative Analysis | “Western-style heritage parks in China” AND “digital tools” AND “visitor interaction” |

3.4.2. PRISMA Process

1. Identification: 40 studies were initially identified based on titles, abstracts, and relevance.
2. Screening: Inclusion criteria focused on empirical studies related to digital engagement tools like AR, VR, social media, gamification, and mobile apps in cultural heritage parks. Studies that were not directly relevant were excluded.
3. Eligibility Assessment: The relevance and quality of shortlisted studies were thoroughly evaluated.
4. Final Selection: Only 8 studies were finalized, due to limited availability of research specifically addressing digital engagement in Western-style heritage parks in China, such as the Wuhu Western-style Cultural Park. This focused selection ensures contextual relevance and strengthens the depth of analysis.

3.5. Data Collection and Analysis

This study relies on secondary data sources, including:

- Academic journal articles on digital engagement in heritage sites.
- Cultural studies and tourism research related to visitor experiences in cultural parks.
- Studies on augmented reality, virtual reality, and gamification in cultural heritage settings.

The case study analysis focused on assessing:

1. Visitor perception of digital media for interactive communication in Wuhu Western-Style Cultural Park, Suzhou Garden, and Guangzhou Cultural Park.
2. Effectiveness of digital media communicative models across the three sites, including immersive experiences, mobile-guided storytelling, social media, and gamification.
3. Comparative strengths and limitations of digital engagement models under the lens of communication perspectives in historical vs. contemporary cultural parks.

4. RESULTS

4.1. Case Study of Wuhu Western-Style Cultural Park

Wuhu Western-Style Cultural Park is a cultural heritage park that exhibits the blending of Western and Chinese architectural features, reflecting historical cross-cultural exchanges and cultural adaptation. The park, found in Anhui Province, brings together European-style structures with classical Chinese motifs to provide a novel visitor experience (Duan & Liu, 2022). The park, even with its cultural heritage, experiences difficulties in welcoming and holding visitors because of aging informational signage and a lack of interactive interaction. This deficiency of interactive interaction indicates a one-way mode of communication, where patrons get information passively without active engagement and feedback opportunities. This mode is restrictive to visitor satisfaction since it fails to cater to diverse reasons for involvement, as the Uses and Gratifications Theory outlines (Falkheimer &

Heide, 2014). Patrons increasingly demand interactive, immersive experiences that satisfy their needs for learning, enjoyment, and social interaction. Lack of dynamic two-way communication means, like digital storytelling or interactive mobile apps, limits these gratifications. The inclusion of such means would not only increase visitor participation but also create greater cultural understanding and longer-term satisfaction. In response to these shortcomings, new digital media technologies have come to revolutionize the experience of visitors and broaden access.

4.1.1. Digital Engagement Tools Implemented

Several technological interaction devices have been brought in to enhance the visitor experience at Wuhu Western-Style Cultural Park. Augmented reality apps enable visitors to scan QR codes of historical buildings and obtain interactive overlays consisting of historical context and three-dimensional reconstructions. Virtual reality areas have replicas of what happened in history, and one can view how the park looked in various points in time. These computer restorations enhance engagement, where visitors can be linked to the park's history instead of regular signage and written materials (Li, Yu, & Liu, 2015). Online narratives and virtual guided tours have also been developed so that historical content is more readable for the masses. Interactive maps, online guides, and narratives developed through AI are all accessible means of communication through a smartphone app and are tailored based on the interests of the visitors so that they get engaged. Other social media platforms such as WeChat, Weibo, and Douyin social media sites are responsible for enhancing visitors' participation, scattering historical information, and advocating live-streaming virtual tours (Dai et al., 2019). These websites push audience interaction outside the park properties, raising visibility and access to distant audiences.

4.1.2. Strengths and Limitations of Digital Strategies

The incorporation of digital technologies has improved visitor engagement by providing interactive, immersive, and personalized experiences. Augmented and virtual reality solutions improve understanding of history, and digital narratives and virtual guided tours offer better insight into the cultural heritage of the park (Challenor & Ma, 2019). Yet challenges persist, most notably related to infrastructure limitations. There are certain spots in the park that are not well connected enough to handle augmented reality, and not everyone carries compatible devices. There are also generational challenges in terms of digital adoption, as the elderly might not be able to navigate mobile applications and interactive components.

4.2. Case Study of Suzhou Garden

Suzhou Garden, which is a UNESCO World Heritage site, is arguably the most celebrated classical Chinese gardens (Park, 2019). It embodies centuries of sophisticated landscaping, blending the natural world with traditional Chinese design elements. While Wuhu Western-Style Cultural Park takes Western and Chinese influences and melts them together, Suzhou Garden focuses on the traditional aesthetic and thus provides the perfect location to examine how digital media can add value to the preservation of cultures without destroying the integrity of the physical environment.

4.2.1. Digital Engagement Tools Implemented

Suzhou Garden has also introduced digital storytelling and mobile-led tours to facilitate visitor interaction. A mobile application provides audio commentary and historical information about different areas of the garden, such as interactive maps, textual descriptions, and audio commentary (Jiang et al., 2022). Unlike Wuhu, where recreations of historical views are provided through augmented reality, Suzhou Garden prioritizes audio and text-based experience in preserving the aesthetic integrity of the site. The enhanced digital signboards employed QR codes to enable users to get thorough

descriptions of history along with poems and multimedia content. Digital walking tours accessible through museum websites and social networks provide distant audiences with panoramic features along with recorded descriptions (Lvyang et al., 2024). These initiatives make the gardens available to everyone without disrupting their visual harmony.

4.2.2. Impact of Digital Engagement in Suzhou Garden

Digital technology now delivers improved accessibility to visitors together with augmented cultural understanding (Liu et al., 2024). Visitors experience complete freedom of exploration while taking mobile-guided tours that allow them to understand the traditional Chinese garden design at their preferred pace. Virtual tours allow distant visitors along with people who cannot make the journey to observe Suzhou Garden at a distance. The online communications which feature text retain the complete visibility of the original setting thus protecting its historical authenticity.

4.3. Case Study of Guangzhou Cultural Park

Guangzhou Cultural Park is an urban cultural tourist destination that marries historical elements with real-time digital engagement methods. In contrast to Wuhu Western-Style Cultural Park and Suzhou Garden, both of which have a focus on digital instruments used for interpreting the past, Guangzhou Cultural Park prioritizes social media interaction, real-time experience, and communal participation.

4.3.1. Digital Engagement Tools Implemented

Guangzhou Cultural Park makes effective use of social media websites like WeChat, Weibo, and Douyin to communicate with visitors in real time through updates, cultural debates, and live performances (Yang & Zhang, 2020). Contrary to Suzhou Garden's mobile-guided storytelling strategy, Guangzhou's visitor engagement approach is social and community-oriented where visitors are allowed to communicate with the park after they have physically visited.

The park also includes interactive digital kiosks offering access to multimedia displays, timelines of the past, and interactive quizzes (Ouyang et al., 2025). Certain exhibits include augmented reality overlays, allowing one to utilize their smartphone in order to see animated cultural relics and historical reconstructions. The park also uses gamification elements, including digital scavenger hunts and interactive storytelling challenges, to engage tourists to go through various parts while completing assignments (Huang, 2024). The park further employs gamification features, such as virtual scavenger hunts and interactive narrative tasks, to engage visitors in discovery of different areas while working on tasks. The features promote two-way interaction by inviting active involvement and comments, consistent with the Uses and Gratifications Theory that posits visitors are motivated by seeking interaction that satisfies their need for entertainment, education, and social interaction. In addition, these digital tools enhance the park's media ecology to form an interactive communication community that offers tourists the opportunity to surround themselves with cultural stories and interact with others.

4.3.2. Impact of Digital Engagement in Guangzhou Cultural Park

More people become involved with the park through digital technology integration which boosted local community participation (Qiu, 2023). Social media marketing creates ongoing relationships between spectators and the park which exceed actual park visits. People of all ages particularly young individuals show stronger participation levels because of gamification elements added to the park. The integration of virtual connection with physical displays results in a better cultural heritage engagement that creates dynamic interactions.

4.4. Comparative Analysis of Wuhu, Suzhou, and Guangzhou

Digital interaction exists in different forms at Wuhu Western-Style Cultural Park and Suzhou Garden and Guangzhou Cultural Park. Wuhu applies interactive augmented reality methods that create immersive re-created viewsapes from ancient times. Suzhou Garden presents mobile-driven information-based interactivity which focuses on historical accuracy combined with accessibility. The digital platform of Guangzhou Cultural Park uses social media-based interactions along with gaming elements to boost user engagement as well as sustained online involvement. Every strategy has its own set of strengths and weaknesses. Wuhu's AR/VR immersive tools provide interactive historical experience but need robust technical infrastructure. Suzhou's strategy maintains cultural integrity but does not have interactive features to engage younger visitors. Guangzhou's gamification and social interaction strategies encourage visitor engagement, but its excessive use of digital tools can cause overstimulation or digital fatigue.

4.5. Systematic Literature Review Findings

The systematic literature review reviewed forty studies, and eight of the key studies were chosen that provide critical data on digital media's role in cultural heritage participation. The studies reviewed varied from virtual and augmented reality to mobile apps, digital storytelling, and gamification of cultural heritage destinations. The Table 3 below outlines the outcomes of the finished studies.

Table 3: Summary of SLR Findings.

| Study No. | Author(s) | Year | Focus Area | Key Findings |
|-----------|---------------|------|--|--|
| 1 | Ouyang et al. | 2025 | Cultural Industry Empowerment in Urban Renewal | Examined digital tools in urban renewal projects in China, emphasizing digital engagement for cultural heritage preservation. |
| 2 | Li et al. | 2022 | Virtual Tours and AR/VR in Heritage Sites | Demonstrated that virtual guided tours and augmented reality significantly increase visitor engagement and accessibility in historical parks. |
| 3 | Keane & Chen | 2017 | Digital China and Cultural Innovation | Identified the shift toward digital presence in cultural spaces, highlighting social media's role in heritage tourism. |
| 4 | Jiang et al. | 2022 | Urban Heritage Conservation and Modern Development | Explored digital strategies for balancing historic preservation with technological advancement in heritage parks. |
| 5 | Zhang et al. | 2022 | Digital Media and Visitor Sentiment in Cultural Parks | Used text mining and sentiment analysis to assess digital engagement in Chinese cultural heritage sites, emphasizing positive visitor response to mobile applications. |
| 6 | Xiao et al. | 2024 | Community Parks and Public Satisfaction | Analyzed how interactive digital features influence visitor satisfaction and cultural heritage appreciation. |
| 7 | Zheng et al. | 2024 | Gamification in Heritage Tourism | Highlighted the effectiveness of gamification elements in increasing cultural learning and engagement. |
| 8 | Huang et al. | 2022 | Virtual Reality for History Teaching and Heritage Learning | Reviewed AR/VR's role in history education, demonstrating its potential for enhancing cultural heritage experiences. |

4.6. Summary of SLR Findings

Findings from these studies point to the influence of virtual and augmented reality software on visitor involvement through enhanced history content interactivity and immersion. Social media campaigning and online public outreach positively affect visitor involvement and information exchange. Mobile applications and digital storytelling positively influence visitor reachability and maneuverability through time-based information and interactive content (Keane & Chen, 2017). Gamification strategies have been employed to improve retention of historical information and visitor engagement, as they encourage participation by engaging individuals through interactive learning (Xing, Xiao, & Luo, 2024). Virtual guided tours have been effective in increasing audience reach, particularly for far-off visitors who may not have the opportunity to visit heritage sites physically.

4.7. Comparative Analysis of Case Study and SLR Findings

4.7.1. *Common Themes from the Case Studies and Literature Review*

Comparative analysis between the case study results and systematic literature review uncovers a few significant themes among digital engagement practices in cultural heritage parks. Immersive technologies like virtual reality and augmented reality are becoming chief drivers of visitor engagement by offering interactive reconstructions of history and architectural evolution. These virtual technologies convert visitor interaction from passive one-way communication to interactive two-way experiences that enable visitors to actively navigate and engage with historical accounts (Pioli, 2024). This change accords with the Uses and Gratifications Theory since visitors are motivated by experiences that fulfill their entertainment and learning desires. Wuhu Western-Style Cultural Park succeeds in using such tools in a meaningful manner by keeping abreast of broader trends from digital heritage parks around the world. The application of augmented reality allows travelers to interact with reconstructions of the past, while virtual reality offers experiential simulations of history, making history real. Guangzhou Cultural Park demonstrates visitor interaction expansion through social media platforms which lead this evolution according to current evidence. The park creates sustained visitor connection through WeChat and Weibo and Douyin which enhances interactive projects and provides real-time events and content-sharing capabilities. These sites facilitate two-way communication by making it possible for visitors to interact with real-time postings, offer their own experiences, and comment. This interactive engagement embodies the spirit of the Media Ecology approach, locating social media as an interactive system of communication that maintains an open-ended exchange between the park and its publics. Social media functions as both an effective educational resource and advertisement platform and creates maximum visitor interaction according to literature review findings. Digital storytelling and gamification strengthen visitor learning because they offer educational historical content through user-friendly interactive platforms. The mobile-created storytelling elements combined with QR-code information displays at Suzhou Garden show how digital storytelling technique can deliver educational experiences that honor historical preservation. But this approach mostly depicts a model of one-way communication, in which visitors gain historical information with no interactive feedback opportunities (Robin, 2016). While effective in preservation of authenticity, it might fail to meet participatory needs of younger, tech-savvy visitors who enjoy more two-way engagement mechanisms. Visitors at Guangzhou Cultural Park can fully engage with the environment because of its gamification features that combine virtual treasure hunts and interactive storytelling competitions while previous research backs such gamified experiences.

4.7.2. *Effective Digital Engagement Strategies*

Each digital engagement strategy used by Wuhu Western-Style Cultural Park, Suzhou Garden and Guangzhou Cultural Park shows a distinct connection to their individual themes and cultural frameworks. The Wuhu Western-Style Cultural Park relies on immersion technologies namely augmented reality and virtual reality to reenact historical changes along with delivering an immersive educational journey for visitors (Xiao et al., 2024). The reviewed literature demonstrates that attractive visits combining AR and VR technology effectively help visitors understand history and remain longer by providing tangible historical experiences and deep historical connection.

Suzhou Garden presents the site through accessible mobile apps alongside narrative tools based on QR codes which deliver information without reducing authenticity. Suzhou Garden uses non-invasive digital informational tools as supplements that serve to enrich cultural stories while preserving the historic landscape design (Zou, Han, & Chang, 2023). The model creates a condition where visitors can

observe historic background and specific data points without modifying the site's visual appearance making it appropriate for heritage settings with delicate structural or environmental elements. Guangzhou Cultural Park, however, effectively combines social media sites, live performances, and consumer-created content to enjoy continuous interaction remotely from the actual location. Participatory interaction is encouraged through the park's participatory strategy in which visitors can document their experience on social media, interact with culture content in real time, and participate in digital storytelling for the park (He & Guo, 2021). This strategy has been validated by the literature review findings, which stressed social media use as a means of increasing cultural participation and reaching younger audiences more likely to consume digital content before, during, and after a visit. While Suzhou and Wuhu emphasize historical interpretation and ease of use, Guangzhou Cultural Park integrates gamification features, including interactive treasure hunts and digital storytelling challenges, to foster discovery and engagement. These gamification approaches promote interactive, two-way communication, inviting visitors not only to interact with the content but also create their own experience by submitting feedback and competing in live challenges (Yurzhenko, Bevzenko, & Kononova, 2022). This method is consistent with the Uses and Gratifications Theory, satisfying the visitor's need for active involvement, enjoyment, and social interaction. Through the introduction of gamified experiences, not only does it increase visitor retention but also an interactive and educational context that appeals to younger consumers (Peng et al., 2023). The findings from the systematic literature review show that gamification enhances the level of engagement, cultural learning, and most notably works in urban heritage contexts where tourists are anticipating a more interactive and participatory experience. The case study and literature review combined demonstrate that the most effective method of maximizing visitor interaction, improving cultural comprehension, and expanding audience reach is an equilibrium of participatory storytelling, immersive technology, and social media engagement. Through the combination of multiple digital technologies, cultural heritage sites can accommodate diverse visitor constituencies, enhance historical interpretation, and create a more immersive and accessible experience for on-site and off-site visitors.

4.7.3. Challenges and Limitations of Current Digital Strategies

Despite the advantages of online interaction, there are some issues and limitations. Access to technology and infrastructural constraints are the obstacles to using digital tools in full scale. While Wuhu Western-Style Cultural Park effectively utilizes AR and VR, there are regions that lack infrastructure to enable full utilization of the tools. Similarly, Suzhou Garden's employment of smartphone-enabled narratives leads to exclusion for those without smartphones from important historical facts. Generational differences in technological adoption are another barrier. Younger tourists enthusiastically engage in gamified activities and social media-driven content, as shown in Guangzhou Cultural Park, but older tourists may struggle with apps and interactive digital experiences. The evidence suggests that cultural heritage destinations must design surrogate engagement strategies, such as guided digital tours or hybrid models that suit varying levels of technological literacy.

The other significant issue is the long-term viability of digital engagement initiatives. The effective use of digital tools demands ongoing content refresh, routine maintenance, and responsiveness to changing visitor expectations. Financial constraints and insufficient technical support can, however, compromise the long-term sustainability of these initiatives. The systematic literature review points out that most cultural sites struggle with funding issues in sustaining digital engagement programs, and therefore, external collaborations and government assistance are necessary.

The case study and literature research findings reveal that although digital media greatly boosts visitors' engagement and appreciation of the culture, questions of accessibility, sustainability, as well

as difference in generations towards technology uptake have to be interrogated in order to maximize digital engagement. This section will be critical in examination of the foregoing findings and an exploration of implications for cultural heritage management at a wider scale. The case studies indicate that the integration of one-way information strategies with two-way interactive communication methods improves visitor experience and satisfaction. This combination permits cultural heritage parks to respond to different visitor needs while enhancing interactive and participatory experiences.

5. DISCUSSION

Inclusion of digital media within cultural heritage parks has changed visitor interaction with immersive, interactive, and inclusive experiences. Comparative findings from Wuhu Western-Style Cultural Park, Suzhou Garden, and Guangzhou Cultural Park's case studies to information gathered during the systematic literature review indicate effectiveness as well as issues with the digital engagement activities within cultural heritage parks. While digital media like augmented reality, virtual reality, mobile apps, and social media initiatives have greatly increased visitor engagement, their uptake comes with obstacles touching on accessibility, infrastructure, and long-term viability (Zheng, Zhang, & Li, 2024). These results coincide with communication theory, and more specifically with the Uses and Gratifications Theory, which stipulates that tourists are driven by a need for interactive, engaging experiences that satisfy learning, entertainment, and social needs (King et al., 2016). In addition, the convergence of digital media generates rich communication systems, as described by the Media Ecology model, in which modes like AR, VR, and social media interact to influence visitor engagement and experience (Radice, 2014). This section critically analyzes the above findings, examines new trends in digital engagement, outlines limitations in existing digital policy, and discusses implications for cultural park management and policy-makers.

5.1. Critical Evaluation of Case Study Findings vs. SLR Findings

Comparative examination of the systematic literature review and the case study identifies numerous similarities and differences in digital participation approaches. Wuhu Western-Style Cultural Park illustrates that augmented reality features improve historical interpretation by enabling people to see the past architectural landmarks and historical happenings. Virtual reality simulations even further engage people in cultural histories, offering a captivating and sensory-rich experience. This transition from static one-way communication to dynamic, two-way experiences mirrors the changing expectations of the visitor for active participation. Benbya et al. (2020) suggest that digital technologies enabling users to interact dynamically with historical accounts can enhance cultural understanding and retention. These immersive approaches respond to varied visitor motivations, supporting the continued applicability of the Uses and Gratifications Theory in maximizing visitor satisfaction. Likewise, literature review results also support the efficiency of such technologies, illustrating that augmented and virtual reality software raises visitor engagement and historical sensitivity. Nevertheless, the case study as well as the studies discussed underscore the downside of such technology, especially as it pertains to infrastructure and access. Electronic equipment demands frequent technological maintenance, good internet coverage, and supportive hardware, which are not accessible to all guests (Arafat, 2022). Also, the technological generation gap continues to be a problem since older tourists might not be able to use augmented reality apps or mobile-guided tours. Suzhou Garden, however, demonstrates that digital storytelling and mobile applications can complement accessibility without sacrificing cultural authenticity. Rather than augmented

reality reconstructions, Suzhou uses QR code-embedded digital storytelling and mobile-guided tours to enable visitors to experience historical narratives without disturbing the garden's traditional look. The findings of the literature review justify this strategy since mobile apps have been proven to improve historical interpretation without demanding much change in infrastructure. The largely one-way communication system of Suzhou Garden, however, even while ensuring historical accuracy, might not always interest young visitors who are accustomed to interactive experiences. According to Kelpšienė et al. (2023), digital platforms with two-way communication like gamified storytelling or real-time feedback mechanisms significantly increase participatory involvement and satisfaction. The integration of such features may enhance interactivity while not sacrificing site authenticity.

Guangzhou Cultural Park offers a socially motivated model of engagement with massive application of social media sites, live streaming, and user-generated content. The strategy of the park creates ongoing digital interaction outside the physical experience, showing the increasing role of social media as a powerful promotion and engagement vehicle in cultural heritage tourism. This participatory communication environment fits within the Media Ecology model, in which social media is used as both communication channel and space for participation (Swensen & Nomeikaite, 2019). The park's initiative to promote visitor-generated content and live interaction echoes trends outlined by Keane and Chen (2017), who contend that participatory digital culture increases cultural attachment and extends visit duration. Results of the systematic literature review affirm that social media campaigns have a substantial impact on visitor engagement and serve as a connection between on-site and off-site engagement. Nevertheless, Guangzhou's strategy also poses the threat of digital fatigue, as excessive dependence on online engagement can restrict more intense physical interaction with cultural displays.

5.2. Effectiveness of Digital Media in Enhancing Visitor Experience

Digital media has been found to be a valuable means of augmenting visitor experience in cultural heritage sites. Augmented reality and virtual reality together provide visitors with a richer comprehension of historical events by allowing them to see historical events, reconstructed architectural features, and interactive simulations (Huang, 2022). Mobile apps make it easier to access with self-guided tours, interactive maps, and visitor preference-based content. Social media outlets expand the visitors' experience to beyond the point of physical entry, establishing continuous conversation between museum and gallery settings and their customers. The success of digital media in cultural parks is also reflected through its capacity to reach out to a variety of audiences. Younger tourists, being more digital-interested, are especially attracted to augmented reality, gamification, and social media engagement (Richards, 2024). Online tourists are facilitated through virtual guided tours, enabling them to access cultural heritage sites at a distance. In addition, the strength of digital engagement is its ability to support two-way interactions. Research by Navarrete (2019) shows that interactive media, including AR-enhanced stories and gamified experiences, greatly enhance engagement by addressing visitors' needs for active involvement and learning. Combining such methods resonates with visitor interests, particularly among younger, technology-literate audiences. Furthermore, interactive digital storytelling increases the quality of learning experiences through providing historical material in stimulating and active formats. Yet, notwithstanding the above benefits, success for digital engagement approaches lies in usability, accessibility, and sustaining efforts in the long run. Ensuring digital tools' usability and friendliness is pivotal in rendering them accessible to wide numbers of visitors with varying degrees of technological acquaintance.

5.3. Future Trends in Public Engagement Through Digital Tools

The development of digital engagement initiatives in cultural heritage destinations is in the direction of some new trends that will dictate visitor experiences in the future. Machine learning and artificial intelligence will play a bigger part in cultural heritage engagement and will provide visitor-centric experiences on the basis of individual visitor interest (Arku & Buttazzoni, 2025). AI-powered virtual assistants and chatbots can serve real-time history facts and advice that are individual visitor-centric. Machine learning algorithms can similarly examine visitor activities to maximize content delivery and interaction strategies. The merging of mixed reality, the blending of augmented and virtual reality, will further enrich visitor experience by enabling effortless transitions between the physical and virtual worlds. Mixed reality apps can offer real-time overlays of historical context while enabling visitors to engage with both the physical and virtual parts of the site.

Blockchain technology is also a new trend that can potentially be used for digital heritage conservation (Ressi et al., 2024). By providing decentralized and unchangeable records of cultural objects, blockchain can aid in the preservation of digital reconstructions of heritage sites and ensure their authenticity. Blockchain technology may also be employed for digital tickets and secure payment in cultural tourism. The growing trend of user-generated content and participatory involvement will also influence the digital heritage experiences of the future. The public increasingly demands to become a part of cultural stories via social media, crowdsourced history, and interactive digital tools. Cultural heritage institutions will have to create engagement strategies that enable visitors to co-author content, with a subsequent feeling of collective cultural ownership.

5.4. Barriers to Digital Adoption in Cultural Parks

While there is strong potential for digital engagement strategies, a number of challenges need to be overcome to make them effective in cultural heritage parks. Among the major challenges is accessibility, especially to those visitors who do not possess the required technological devices or experience with digital tools (Mangold et al., 2024). While younger generations are quick to embrace digital engagement strategies, aging travelers might find it challenging to use augmented reality applications or mobile-based guided tours. Having other participation opportunities available, such as traditional signage or guided tours, will be vital in ensuring access.

Finance is also a critical obstacle to the adoption of digital technologies in cultural parks. Producing, upgrading, and sustaining digital tools are capital-intensive endeavors (Lucchi, Adami, & Stawinoga, 2023; Wang & Mustafa, 2024). Most cultural heritage destinations have thin budgets, making it challenging to set aside finances for technology incorporation. Collaborations with tech companies, government sponsorships, and cultural grants are possible avenues of resolving the challenge of finance. Technical infrastructure is also an issue, especially in outdoor heritage sites where internet accessibility and electricity supply are not assured. High-performance devices and stable connections are needed for augmented and virtual reality applications, which might not be available in all heritage sites. Having digital tools properly work in varying environments will be essential for their continued success. The incorporation of digital devices that facilitate two-way communication, participatory interaction, and interactive learning is supportive of the Uses and Gratifications Theory and Media Ecology theory (Weiyang, 2015). By embracing such strategies, cultural heritage parks can encourage more intense visitor engagement, increase cultural awareness, and develop sustainable models for participation.

5.5. Implications for Cultural Park Management and Policymakers

The outcomes of the current research present various implications for policymakers and cultural

park managers. For one, cultural heritage managers need to make user-friendly digital engagement strategies a priority, which respond to the heterogeneity of visitors. Ensuring that digital tools are accessible involves offering clear guidance, multilingual functionalities, and accessibility features. Second, digital content must be maintained and refreshed in order to continue attracting visitors. Periodic updates of augmented reality experiences, gamified content, and social media campaigns will keep digital engagement initiatives fresh. Third, there should be governmental support of cultural heritage sites by opening funding schemes and technology grants for enabling digital innovation. It can be developed by establishing public-private partnerships with digital companies that provide access to latest digital instruments and decrease costs for cultural parks. Lastly, digital literacy programs for visitors who are unaware of cutting-edge technologies should be integrated into cultural heritage sites. Offering workshops or tours can close the knowledge gap and ensure all visitors take advantage of digital engagement activities.

6. CONCLUSION

Digital media has drastically altered visitor interaction and perception within cultural heritage parks. The case studies, supplemented by results from the systematic literature review, indicates the way augmented reality, virtual reality, mobile apps, and social media enhance visitors' experiences. The tools provide interactive narration, immersive reconstruction, and real-time interaction, opening up heritage destinations to wider accessibility and interaction. Nonetheless, limitations such as infrastructure, accessibility issues, and sustainability issues continue to be fundamental challenges. Augmented and virtual reality enhance historical awareness by offering interactive reconstructions, and social media sites expand visitor interaction beyond the location. Mobile apps and gamification tactics increase accessibility and participatory involvement. Infrastructure limitations, differences in digital adoption among generations, and the requirement for regular updates pose difficulties in maintaining digital engagement strategies.

To maximize digital interaction, heritage sites must focus on inclusive design so that digital tools are accessible to a wide range of visitors. Keeping content up to date, forging strategic alliances with technology suppliers, and investing in sustainable infrastructure can assist in overcoming operational issues. Future studies should investigate several heritage sites and use quantitative data to measure visitor satisfaction and engagement levels. Moreover, new technologies like artificial intelligence and mixed reality need to be studied for their potential in managing cultural heritage. By addressing these issues, cultural heritage parks will be able to make the most out of digital engagement, developing interactive and meaningful experiences for visitors.

REFERENCES

- Arafat, M. (2022). Limitations of the Digital Learning Tools of the 21st Century. *Actual Problems in the System of Education: General Secondary Education Institution–Pre-University Training–Higher Education Institution*, (2), 133-142. <https://doi.org/10.18372/2786-5487.1.16591>
- Arku, R. N., & Buttazzoni, A. (2025). A framework to evaluate the effectiveness of web-based geo-participation tools as a public participation technique. *Cartography and Geographic Information Science*, 1-17. <https://doi.org/10.1080/015230406.2025.2464661>
- Benbya, H., Nan, N., Tanriverdi, H., & Yoo, Y. (2020). Complexity and Information Systems Research in the Emerging Digital World. *Management Information Systems Quarterly*, 44(1), 1-17. <https://aisel.aisnet.org/misq/vol44/iss1/3>
- Boboc, R. G., Băutu, E., Gorbacia, F., Popovici, N., & Popovici, D.-M. (2022). Augmented Reality in Cultural Heritage: An Overview of the Last Decade of Applications. *Applied Sciences*, 12(19), 9859. <https://doi.org/10.3390/app12199859>

- Challenor, J., & Ma, M. (2019). A Review of Augmented Reality Applications for History Education and Heritage Visualisation. *Multimodal Technologies and Interaction*, 3(2), 39. <https://doi.org/10.3390/mti3020039>
- Chinadiscovery.com. (2025). *Wuhu China: Wuhu travel guide & Wuhu Anhui tours 2025/2026*. <https://www.chinadiscovery.com/anhui/wuhu.html>
- Dai, P., Zhang, S., Chen, Z., Gong, Y., & Hou, H. (2019). Perceptions of Cultural Ecosystem Services in Urban Parks Based on Social Network Data. *Sustainability*, 11(19), 5386. <https://doi.org/10.3390/su11195386>
- Dearing, J. W., & Cox, J. G. (2018). Diffusion Of Innovations Theory, Principles, And Practice. *Health Affairs*, 37(2), 183-190. <https://doi.org/10.1377/hlthaff.2017.1104>
- Dinis, G., Carneiro, M. J., Maiuro, M., Mota, M., & Abrunhosa, R. (2024). Digital Interpretation as a Visitor Management Strategy: The Case of Cça Valley Archeological Park and Museum. In J. Chica-Olmo, M. Vujičić, R. A. Castanho, U. Stankov, & E. Martinelli (Eds.), *Sustainable Tourism, Culture and Heritage Promotion* (pp. 77-88). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-49536-6_9
- Duan, J., & Liu, J. (2022). *Contemporary Urban Design Thoughts in China*. Springer. <https://doi.org/10.1007/978-981-19-0941-2>
- Falkheimer, J., & Heide, M. (2014). Strategic Communication in Participatory Culture: From One-and Two-way Communication to Participatory Communication Through Social Media. In D. Holtzhausen & A. Zerfass (Eds.), *The Routledge Handbook of Strategic Communication* (pp. 337-350). Routledge. <https://www.taylorfrancis.com/chapters/edit/10.4324/9780203094440-25>
- Ge, L., Gilardi, F., Whyke, T. W., & Yang, K. C. (2024). Video-streamed Intangible Cultural Heritage, Ethnic Perceptions, and Cross-cultural Competence in China. *Journal of Ethnic and Cultural Studies*, 11(4), 97-123. <https://doi.org/10.29333/ejecs/2106>
- Gensler, S., Vüclckner, F., Liu-Thompkins, Y., & Wiertz, C. (2013). Managing Brands in the Social Media Environment. *Journal of Interactive Marketing*, 27(4), 242-256. <https://doi.org/10.1016/j.intmar.2013.09.004>
- He, J., & Guo, N. (2021). Culture and Parks: Incorporating Cultural Ecosystem Services Into Conservation in the Tibetan Region of Southwest China. *Ecology & Society*, 26(3), 12. <https://doi.org/10.5751/ES-12572-260312>
- Henderson, R. (2012). *The Gardens of Suzhou*. University of Pennsylvania Press. <https://www.pennpress.org/9780812222142/the-gardens-of-suzhou>
- Hijazi, A. N., & Baharin, H. (2022). The Effectiveness of Digital Technologies Used for the Visitor's Experience in Digital Museums. A Systematic Literature Review from the Last Two Decades. *International Journal of Interactive Mobile Technologies*, 16(16), 142-159. <https://doi.org/10.3991/ijim.v16i16.31811>
- Huang, J. (2022). A Systematic Review of Virtual Reality/Augmented Reality Technology for History Teaching. *Augmented Reality Technology for History Teaching*. <https://2022.icome.education/wp-content/uploads/2022/07/HUANG22098-Jun-Huang.pdf>
- Huang, X.-X. (2024). The Construction of Place Meaning of Historic Parks – A Case Study of People's Park in Guangzhou, China. *E3S Web of Conferences*, 512, 02012. <https://doi.org/10.1051/e3sconf/202451202012>
- Jiang, J., Zhou, T., Han, Y., & Ikebe, K. (2022). Urban Heritage Conservation and Modern Urban Development from the Perspective of the Historic Urban Landscape Approach: A Case Study of Suzhou. *Land*, 11(8), 1251. <https://doi.org/10.3390/land11081251>
- Keane, M., & Chen, Y. (2017). Digital China: From Cultural Presence to Innovative Nation. *Asiascape: Digital Asia*, 4(1-2), 52-75. <https://doi.org/10.1163/22142312-12340068>
- Kelpšienė, I., Armakauskaitė, D., Denisenko, V., Kirtiklis, K., Laužikas, R., Stonytė, R., et al. (2023). Difficult heritage on social network sites: An integrative review. *New Media & Society*, 25(11), 3137-3164. <https://doi.org/10.1177/14614448221122186>
- King, L., Stark, J. F., & Cooke, P. (2016). Experiencing the Digital World: The Cultural Value of Digital Engagement with Heritage. *Heritage & Society*, 9(1), 76-101. <https://doi.org/10.1080/2159032X.2016.1246156>
- Li, G., Yu, Q., & Liu, J. (2015). *BUM. Project of the Bund Urban Museum for One New Form of Metropolis* [Master's Thesis, Polytechnic of Milan]. <https://hdl.handle.net/10589/134414>
- Li, J., Nie, J.-W., & Ye, J. (2022). Evaluation of virtual tour in an online museum: Exhibition of Architecture of the Forbidden City. *PLoS One*, 17(1), e0261607. <https://doi.org/10.1371/journal.pone.0261607>
- Liu, M., Chen, Z., Li, Q., & Li, X. (2024). Suzhou Garden Dynamic Image Design Based on Digital Media Programming and Sound Visualization. In C. Stephanidis, M. Antona, S. Ntoa, & G. Salvendy (Eds.), *HCI International 2024 Posters* (pp. 266-275). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-61950-2_30
- Lucchi, E., Adami, J., & Stawinoga, A. E. (2023). Social acceptance of photovoltaic systems in heritage buildings and landscapes: Exploring barriers, benefits, drivers, and challenges for technical stakeholders in northern Italy. *Sustainable Energy Technologies and Assessments*, 60, 103544. <https://doi.org/10.1016/j.seta.2023.103544>
- Lvyang, Z., Wen, L., Yang, Z., Jiaqi, L., & Lidong, Z. (2024). Yuan: Research on the Concept of Digital World Analogue Scientific Infrastructure and Science Popularization Communication Based on Suzhou Gardens Pattern. *arXiv preprint arXiv:2410.10248*. <https://doi.org/10.48550/arXiv.2410.10248>
- Mangold, M., Schwietering, A., Zink, J., Steinbauer, M. J., & Heurich, M. (2024). The digitalization of outdoor recreation: Global perspectives on the opportunities and challenges for protected area management. *Journal of Environmental Management*, 352, 120108. <https://doi.org/10.1016/j.jenvman.2024.120108>

- Mehrad, J., & Tajer, P. (2016). Uses and Gratification Theory in Connection with Knowledge and Information Science: A Proposed Conceptual Model. *International Journal of Information Science and Management (IJISM)*, 14(2), 1-14. https://ijism.isc.ac/article_698234.html
- Mohajan, H. K. (2018). Qualitative Research Methodology in Social Sciences and Related Subjects. *Journal of Economic Development, Environment and People*, 7(1), 23-48. <https://mpr.ub.uni-muenchen.de/id/eprint/85654>
- Navarrete, T. (2019). Digital heritage tourism: innovations in museums. *World Leisure Journal*, 61(3), 200-214. <https://doi.org/10.1080/16078055.2019.1639920>
- O'Donnell, P. M. (2017). Cultural Landscape Preservation: An Evolving Field. *Landscape Journal*, 35(2), 203. <https://doi.org/10.3368/lj.35.2.203>
- Ouyang, Y., Bai, X., Wang, X., Chen, Y., Huang, G., & Xie, D. (2025). Case Study on Cultural Industry Empowerment in Urban Renewal: A Focus on Guangzhou, China. *Sustainability*, 17(2), 439. <https://doi.org/10.3390/su17020439>
- Park, H.-S. (2019). An Outstanding Universal Value and the Management of Historic Gardens in Suzhou, China. *Journal of the Korean Institute of Traditional Landscape Architecture*, 37(1), 76-84. <https://doi.org/10.14700/KITLA.2019.37.1.076>
- Peng, K., Tao, X., Jiang, J., & Zhai, J. (2023). The Experience Design of Cultural Heritage Tourism in the Perspective of Gamification. In A. Marcus, E. Rosenzweig, & M. M. Soares (Eds.), *Design, User Experience, and Usability* (pp. 127-146). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-35705-3_10
- Pioli, M. (2024). *Museums of the Future: Digitalisation as a New Form of Communication* [Doctoral dissertation, Universita Ca' Foscari Venezia]. <https://hdl.handle.net/20.500.14247/17218>
- Qiu, Q. (2023). Identifying the role of intangible cultural heritage in distinguishing cities: A social media study of heritage, place, and sense in Guangzhou, China. *Journal of Destination Marketing & Management*, 27, 100764. <https://doi.org/10.1016/j.jdmm.2023.100764>
- Radice, S. (2014). *Designing for Participation Within Cultural Heritage. Participatory practices and audience engagement in heritage experience processes* [Doctoral dissertation, Politecnico di Milano]. <https://hdl.handle.net/10589/89798>
- Ressi, D., Romanello, R., Piazza, C., & Rossi, S. (2024). AI-enhanced blockchain technology: A review of advancements and opportunities. *Journal of Network and Computer Applications*, 225, 103858. <https://doi.org/10.1016/j.jnca.2024.103858>
- Richards, G. (2018). Cultural tourism: A review of recent research and trends. *Journal of Hospitality and Tourism Management*, 36, 12-21. <https://doi.org/10.1016/j.jhtm.2018.03.005>
- Robin, B. R. (2016). The Power of Digital Storytelling to Support Teaching and Learning. *Digital Education Review*, (30), 17-29. <https://doi.org/10.1344/der.2016.30.17-29>
- Swensen, G., & Nomeikaite, L. (2019). Museums as narrators: heritage trails in a digital era. *Journal of Heritage Tourism*, 14(5-6), 525-543. <https://doi.org/10.1080/1743873X.2019.1574803>
- Upadhyaya, H. (2024). *Digital Education And Economic Transformation: Bridging The Gap*. Meadow Publication.
- Wang, N., & Mustafa, H. (2024). An Overview of Marketing Strategies for City Brand Communication in the Context of Globalisation: An Analysis of Effective Paths to Enhance a City's International Image. *Review of Communication Research*, 12, 251-264. <https://doi.org/10.52152/RCR.V12.15>
- Weiyang, L. (2015). A Historical Overview of Uses and Gratifications Theory. *Cross-Cultural Communication*, 11(9), 71-78. <https://doi.org/10.3968/7415>
- Xiao, J. X., Liao, J., Zhao, B., Long, Y., Xu, X., Liang, X., et al. (2024). The influence of community park characteristics on satisfaction in Guangzhou: Moderating and mediating effects analysis. *Heliyon*, 10(10), e31043. <https://doi.org/10.1016/j.heliyon.2024.e31043>
- Xing, Y., Xiao, Y., & Luo, Y. (2024). Integrating restoration and interactive exploration to enhance cultural heritage through VR storytelling. *Scientific Reports*, 14(1), 21194. <https://doi.org/10.1038/s41598-024-72182-9>
- Yang, S., & Zhang, M. (2020). Changes in Tourism Destination Image of Guangzhou. *Journal of Service Science and Management*, 13(03), 101156. <https://doi.org/10.4236/jssm.2020.133038>
- Yurzhenko, A. Y., Bevzenko, J. Y., & Kononova, O. Y. (2022). Creation of a Distance Communication Channel With Gamification Elements. In O. Bernardes, V. Amorim, & A. C. Moreira (Eds.), *Handbook of Research on the Influence and Effectiveness of Gamification in Education* (pp. 226-240). IGI Global. <https://doi.org/10.4018/978-1-6684-4287-6.ch012>
- Zhang, T., Li, B., & Hua, N. (2022). Chinese cultural theme parks: text mining and sentiment analysis. *Journal of Tourism and Cultural Change*, 20(1-2), 37-57. <https://doi.org/10.1080/14766825.2021.1876077>
- Zheng, Y., Zhang, J., & Li, J. (2024). Gamified experience design: a case study on China's immersive tourist blocks in historic cities. *Frontiers in Sustainable Tourism*, 3, 1482203. <https://doi.org/10.3389/frsut.2024.1482203>
- Zou, T.-Q., Han, Q., & Chang, D.-F. (2023). A comparative study on the administrative systems of national parks and national cultural parks in China. *Journal of Natural Resources*, 38(9), 2283-2295. <https://www.jnr.ac.cn/EN/abstract/abstract54833.shtml>