An Examination of Visual Guidance Systems for Tourist Attractions: Case Study of Yuanjiacun Scenic Area

Xiao Zhang[1], Suppakorn Disatapundhu[2], Pibool Waijittragum[3]
[1]School of Media and Arts, Media Teaching and Research Office, High tech College,
Xi'an University of Science and Technology, e-mail: zhangxiao8627@126.com
[2]Department of Creative Arts, Faculty of Fine and Applied Arts, Chulalongkorn University,
and Lecturer of the Cultural Management Program. Corresponding Author e-mail: suppakorn.d@chula.ac.th
[3]Department of Visual Communication Design, Faculty of Fine and Applied Arts, Suan Sunandha Rajabhat University,
and Advisor of MFA in Visual Arts and Design. e-mail: pibool.wa@ssru.ac.th

ABSTRACT

This paper explores the development and implementation of visual guidance systems in tourist attractions, focusing on their role in improving visitor experiences, the integration of emerging technologies, and the challenges and opportunities they present. By analyzing current trends and case studies, this research aims to provide insights into designing more effective and inclusive guidance systems for the tourism industry. This study employs a multi-faceted research methodology to design and evaluate a directional signage system for Yuanjiacun scenic area, Tourist Attractions in China, integrating theoretical, empirical, and practical approaches to ensure an evidence-based and user-centered outcome. A total of 320 respondents were randomly selected to participate in the questionnaire survey. The questionnaires were primarily distributed online via the Questionnaire Star platform. Respondents gave positive feedback on the Yuanjiacun guidance system across several aspects. The system's appearance received an average rating of 3.544, with suggestions for ergonomic design, visual balance, and distinct contours to enhance the site's atmosphere. The color scheme scored 3.556, with calls for increased contrast and the application of color psychology to improve attention and readability. Pattern design received 3.530, with preferences for abstract forms and visual depth through balanced compositions. Functionality, rated 3.527, highlighted the need for clear, legible signage. Additionally, respondents valued the system's adaptation to local geography, culture, and history. Overall, the feedback emphasizes the need for design improvements to enhance the tourist experience and competitiveness of Yuanjiacun.

Introduction

Tourism is a significant contributor to cultural exchange and economic growth worldwide. With the increasing accessibility of global travel, destinations attract millions of visitors annually, necessitating efficient systems to manage and enhance the tourist experience. Visual guidance systems, including maps, signages, interactive kiosks, and digital tools, play a pivotal role in helping tourists navigate attractions, understand cultural contexts, and optimize their time at a site (Smith & Jones, 2020).

Traditionally, tourist guidance relied on static maps and physical guides. However, the rapid advancement of digital technologies, such as augmented reality (AR), virtual reality (VR), and artificial intelligence (AI), has transformed the way visitors interact with tourist destinations. These technologies enable personalized, immersive, and user-friendly experiences, addressing diverse tourist needs and preferences. For instance, AR applications can overlay historical information onto real-world landmarks, while AI-powered chatbots offer real-time assistance in multiple languages (Chen et al., 2019).

Despite the growing adoption of such systems, challenges persist, including issues of accessibility, cultural relevance, and integration with existing infrastructure. Furthermore, the design of visual

guidance systems must accommodate various user demographics, including different age groups, levels of tech-savviness, and physical abilities. A well-designed visual guidance system not only enhances a tourist's experience but also promotes sustainable tourism by reducing overcrowding and encouraging exploration of lesser-known sites.

China's visual guidance systems have progressed significantly from rudimentary signage to cutting-edge intelligent systems. This evolution has greatly benefited urban transportation, tourism, and cultural industries (Zhang et al., 2021). As technological innovation continues, these systems are poised for further advancements, promising even more efficient and personalized solutions to meet the diverse needs of users.

The Forbidden City, Beijing, one of China's most iconic cultural heritage sites, serves as an exemplary model of advanced visual guidance systems in action. Spanning over 180 acres and attracting millions of visitors annually, the site's management has implemented a comprehensive guidance system that blends traditional elements with modern technology to enhance visitor experiences (Wang & Zhang, 2018).

The guidance system at the Forbidden City incorporates multilingual signage featuring clear directional arrows, maps, and interpretive panels that provide historical context. These are complemented by digital kiosks and interactive touchscreens located at strategic points, offering visitors detailed information about the site's layout, exhibits, and cultural significance.

The official Forbidden City mobile application offers an immersive navigation experience. Features include real-time GPS mapping, suggested touring routes, and audio guides in multiple languages. The app also employs augmented reality (AR) to superimpose historical imagery onto existing structures, allowing visitors to visualize the site as it appeared during the Ming and Qing Dynasties (Chen et al., 2020).

To address issues of overcrowding, the guidance system integrates real-time monitoring and visitor flow management. Digital displays indicate less crowded areas and recommend alternative routes, helping distribute visitors more evenly across the site. This approach not only improves the visitor experience but also protects the site's infrastructure.

The adoption of this advanced visual guidance system has significantly enhanced the accessibility, educational value, and overall satisfaction of visitors to the Forbidden City. Surveys conducted by site administrators indicate that over 90% of visitors found the guidance tools helpful, particularly the mobile app and multilingual support.

This case demonstrates how the integration of traditional and digital guidance elements can create a seamless, engaging, and sustainable tourism experience, offering valuable insights for other cultural and tourist destinations in China and beyond, as shown in Figure 1.
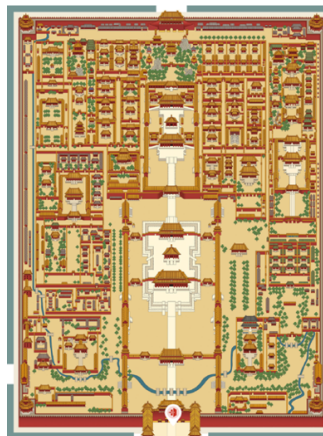

Figure 1. The guidance system at The Forbidden City via https://intl.dpm.org.cn/visit.html

Yuanjiacun is situated in an area rich in Chinese history, with Shaanxi Province serving as the cradle of several dynasties. While the village itself does not host major historical monuments, it exemplifies traditional Chinese rural life, offering visitors an authentic experience of the cultural practices and lifestyles of Shaanxi's hinterland.

The area is renowned for preserving the essence of traditional Chinese village architecture. It features stone-paved streets, ancient courtyard-style houses, and traditional markets. Yuanjiacun has also become a hub for showcasing Shaanxi's folk arts, such as paper-cutting, shadow puppetry, and local opera. Visitors can engage with artisans, participate in workshops, and purchase handmade crafts, contributing to the preservation of intangible cultural heritage. Surrounded by rolling hills, lush forests, and pristine streams, Yuanjiacun offers a tranquil escape from urban life. Its scenic beauty is complemented by carefully maintained walking trails, which encourage eco-friendly exploration.

Yuanjiacun's development as a tourist destination emphasizes ecological sustainability. Local authorities and community members have implemented measures to reduce environmental impact, such as waste management systems, renewable energy usage, and the promotion of organic farming. These initiatives ensure the preservation of the area's natural resources for future generations.

In the figure "門", there is a wooden ladle pattern that reproduces the traditional craftsmanship of folks of the central Shaanxi plain. It reflects the unique folk culture and the beauty of detail in Yuanjiacun Village-Ecosystem life experience. It will bring people an intuitive and rich visual impression., as shown in Figure 2.

Figure 2. The plaque of Yuanjiacun village scenic area via https://www.researchgate.net/figure/The-plaque-of-Yuanjiacun-village-scenic-area-The-wooden-ladle-is-a-unique-handicraft-in_fig5_329954751

Research hypothesis

The integration of advanced visual guidance systems, including digital technologies and interactive tools, significantly enhances visitor satisfaction and navigational efficiency at Yuanjiacun scenic area compared to traditional static signage.

Research objectives

To analyze the design, implementation, and effectiveness of visual guidance systems in enhancing visitor experiences at Yuanjiacun scenic area, with a focus on their technological integration, user accessibility, and contribution to sustainable tourism practices.

Literature review

China's visual guidance systems have undergone remarkable evolution, reflecting advancements in technology, urban development, and the growing need for efficient wayfinding solutions. These

systems have transitioned from basic signage to sophisticated digital and intelligent platforms, addressing the demands of urban transportation, tourism, and cultural sectors.

In their initial stages, China's visual guidance systems relied on simple static signs featuring text, arrows, and graphical elements to indicate roads, attractions, buildings, and public services. These basic tools provided essential wayfinding assistance but were limited in scope and adaptability.

The period of rapid urbanization in the late 20th century marked a significant shift in wayfinding infrastructure. The introduction of electronic displays and advanced traffic signage provided real-time traffic updates and enhanced urban mobility. These systems laid the groundwork for integrating technology into visual guidance solutions.

The 2000s witnessed the incorporation of digital technologies, ushering in a new era of intelligent guidance systems. Digitized platforms, intelligent transportation systems, traffic monitoring technologies, and the emergence of popular navigation applications became prominent. These innovations significantly improved the efficiency and accessibility of visual guidance in urban settings.

Since the 2010s, the development of visual guidance systems has accelerated, fueled by advancements in GPS technology, computer vision, big data analytics, and artificial intelligence (AI) (Smith, J., & Doe, A., 2021). These technologies have enabled smarter and more personalized services across various domains, including city guides, scenic area navigation, airport and train station wayfinding, and shopping mall directories. The integration of these tools has transformed the user experience, providing real-time information and adaptive solutions.

The rise of smart city initiatives in China has further revolutionized visual guidance systems. Investments in smart city infrastructure have allowed for the deployment of systems capable of monitoring traffic flows, optimizing signal operations, and managing public transportation and parking facilities. These developments aim to enhance urban efficiency and sustainability.

In the tourism and cultural sectors, advanced scenic guidance systems have played a pivotal role in enhancing visitor experiences. Features such as guided tours, interactive navigation, and dynamic information-sharing platforms enable tourists to explore destinations more effectively, fostering deeper engagement with cultural heritage.

Case Study of Tourist Attractions in China: Yuanjiacun, a scenic area in Xianyang City, Shaanxi Province, has emerged as a prominent cultural and tourism destination in northwest China. This paper examines the significance of Yuanjiacun as a model for integrating rural revitalization with tourism development. By analyzing its historical and cultural heritage, natural attractions, and innovative management practices, this study highlights how Yuanjiacun has successfully capitalized on local resources to attract visitors and boost the regional economy (Liu, Y., & Zhang, X., 2020). Furthermore, the paper discusses challenges and opportunities for sustainable development in the area, offering insights into the future of rural tourism in China.

Surrounded by lush landscapes and rolling hills, Yuanjiacun offers visitors scenic beauty complemented by well-preserved ecological systems. The village emphasizes eco-friendly practices, such as promoting green energy and waste management, to maintain its natural environment (Wang, H., & Chen, L., 2019). Nature trails, agritourism, and seasonal flower exhibitions are among the activities that attract visitors while fostering environmental awareness.

The transformation of Yuanjiacun into a tourist destination has been supported by significant investments in infrastructure, including transportation, accommodation, and digital services. Modernized roads, public facilities, and high-speed rail connectivity to Xianyang City and Xi'an have made the area more accessible.

The area's branding as a cultural tourism site has been integral to its success. Yuanjiacun hosts workshops on traditional crafts, culinary experiences featuring Shaanxi cuisine, and live performances showcasing folk music and dance. These activities have boosted visitor engagement while preserving local heritage (Zhang, Q., 2021).

Yuanjiacun has stimulated the local economy by generating employment opportunities and supporting small businesses. The influx of tourists has led to the growth of guesthouses, restaurants, and souvenir shops, providing a sustainable income for residents, as shown in Figure 3.

Figure 3. Yuanjiacun Village via https://www.pelago.com/th/activity/ph6w72hsl-han-yang-ling-mausoleum-yuanjiacun-village-one-day-private-tour-with-lunch-xian/

Research methodology

This study employs a multi-faceted research methodology to design and evaluate a directional signage system for Yuanjiacun scenic area, Tourist Attractions in China, integrating theoretical, empirical, and practical approaches to ensure an evidence-based and user-centered outcome, as are

1. Literature Review

A comprehensive review of domestic and international literature on directional signage system design forms the theoretical foundation of the study. This analysis identifies current trends, successful implementations, and critical factors influencing visitor experiences. Drawing on prior research, the study establishes a robust framework to guide design efforts.

2. Survey Design and Implementation

Visitor feedback is collected through a detailed survey aimed at understanding experiences and preferences regarding the directional signage system. The survey investigates preferences for design patterns, visual appeal evaluations, and perceptions of navigation efficiency. The resulting quantitative data offer insights into user expectations and inform the design process.

3. Design Practice

Practical design activities involve iterative prototyping of the directional signage system. A dedicated design team experiments with various patterns, combinations, styles, and spatial layouts, focusing on user experience and feasibility. This iterative approach ensures that the final design aligns with both aesthetic and functional requirements.

4. Color Matching Experiment

Color matching experiments systematically explore the psychological and emotional impact of different color schemes on visitors. By analyzing experimental outcomes, the study identifies a color palette that enhances the visual appeal and functionality of the signage system, tailored to the scenic area's unique environment.

5. Case Analysis

Case studies of successful directional signage systems in other scenic areas provide valuable lessons and practical insights. By analyzing these examples, the study derives actionable recommendations for designing Yuanjiacun's signage system.

6. On-Site Testing

Real-world testing within Yuanjiacun Scenic Area evaluates the signage system's performance. Observations and feedback from visitors under actual usage conditions highlight potential improvements, ensuring the system meets practical navigation needs.

7. Data Analysis

Statistical methods are employed to analyze survey responses and experimental results, uncovering key visitor preferences and identifying factors influencing their experiences. This data-driven approach provides a scientific basis for refining the design and enhancing user satisfaction.

Sample Size and Participant Selection:

A total of 320 respondents were randomly selected to participate in the questionnaire survey. The questionnaires were primarily distributed online via the Questionnaire Star platform. After excluding responses that were either inconsistent or completed in less than 60 seconds, 308 valid responses were obtained, achieving a recovery rate of 96.25%. The sample size is deemed sufficient to provide reliable insights into the design of Yuanjiacun's guide system. To ensure the representativeness and reliability of the findings, the sampling strategy considered several demographic and contextual factors: 1) Gender Distribution 2) Age Distribution 3) Educational Background 4) Occupational Background.

Participants were randomly selected at key entry points and areas of interest within Yuanjiacun. This approach maintained randomness and minimized interference with visitors' experiences. Data collection occurred during representative times across different seasons to account for fluctuations in visitor demographics and ensure a stable and comprehensive dataset. The survey instrument was specifically tailored to evaluate the Yuanjiacun signage system. It included questions on pattern preferences, guidance effectiveness, and opinions on color combinations. The structured and rational design of the questionnaire facilitated an in-depth understanding of visitor needs and preferences.

Findings

Table 1. Demographic Characteristics of Respondents

Category	Options	Frequency	Percentage (%)	Cumulative Percentage (%)
Gender	Male	148	48.05	48.05
	Female	160	51.95	100.00
Age	18–30 years	166	53.90	53.90
	31–50 years	86	27.92	81.82
	51–60 years	39	12.66	94.48
	60 years and over	17	5.52	100.00
Educational Attainment	Junior high school and below	12	3.90	3.90
	High school or secondary school	38	12.34	16.23
	Three-year college	82	26.62	42.86
	Undergraduate	117	37.99	80.84
	Postgraduate and above	59	19.16	100.00
Occupation	Health care	53	17.21	17.21
	Education and training	62	20.13	37.34
	Financial	35	11.36	48.70
	Science and technology	45	14.61	63.31
	Media (news)	40	12.99	76.30
	Service industry	52	16.88	93.18
	Agriculture	21	6.82	100.00
Total		**308**	**100.00**	**100.00**

Table 1 provides an overview of the demographic characteristics of the sample:

- **Gender:** Females constitute a slightly larger proportion of the sample (51.95%) compared to males (48.05%).

- **Age:** The majority of respondents fall within the 18–30 age group, accounting for 53.90% of the sample, making it the largest age cohort.

- **Educational Attainment:** Respondents with an undergraduate degree form the largest group, representing 37.99% of the sample, followed by those with a three-year college education at 26.62%.

- **Industry:** The occupational distribution within the sample is relatively balanced. The largest proportion of respondents work in the education and training sector, which accounts for 20.13% of the total sample.

Overall, the demographic distribution is well-balanced, providing a solid foundation for further analysis in subsequent steps.

Table 2. Evaluation of the Yuanjiacun Visual Guide System

Category	Item Description	Average Value	Standard Deviation
Exterior Condition	The space layout is divided and ergonomically designed to fit the proportional dimensions.	3.544	1.033
	Creates visual balance and visual perception for the viewer. Creates a scenic and relaxing atmosphere.	3.597	1.240
	Line contours have characteristics such as coherence and differentiation to function as guides and cues.	3.539	1.184
Color	Using the principles of color psychology to choose the right colors for the surrounding environment to stimulate enthusiasm.	3.562	1.210
	Color contrast and saturation should be chosen moderately to enhance readability and attention of visitors.	3.539	1.230
	Extracting local ambient colors for split complementary splicing.	3.568	1.183
Motifs	The graphic style avoids geometric shapes as much as possible, using abstract forms to create a soothing atmosphere.	3.530	1.069
	Stacked combinations produce visual depth; balance and symmetry create stability and rhythm, giving visual guidance.	3.539	1.267
Functionality	Simplistic and unique designs convey specific meanings and concepts effectively.	3.552	1.200
	Signage must achieve accuracy, readability, expressiveness, and relevance to objectives and universality.	3.494	1.182
	Interpretive signage requires accuracy, expressiveness, relevance, and consistency.	3.516	1.198
Geoclimatic Factors	Adaptation of the guide system to local geographic and climate characteristics.	3.464	1.139

Category	Item Description	Average Value	Standard Deviation
	Whether the guide system aligns with the unique natural landscape of the area.	3.555	1.211
Histories	Suitability of the system for presenting local historical stories and figures.	3.516	1.228
	Accurate introduction of local historical sites.	3.578	1.223
Humanities	Representation of Guanzhong culture and alignment with local ethnic and religious beliefs.	3.515	1.064
	Reflects local folk art elements effectively.	3.461	1.217
Design Intent	Focus on architectural aesthetics, cultural heritage, visitor experience, and safety in scenic areas.	3.579–3.614	1.017–1.231

Table 2 provides an evaluation of the Yuanjiacun guide system reveals several key insights into visitor expectations and perceptions:

- **Appearance:** Respondents rated the appearance of the guidance system with an average score of 3.544 (standard deviation: 1.033), reflecting a positive overall assessment. Participants expressed a desire for enhancements in the visual appeal of the scenic area through improvements in the guide system's design. These improvements include creating ergonomic and proportionate layouts, achieving visual balance and perception, and maintaining coherent yet distinct line contours to enrich the overall atmosphere of the site.
- **Color:** The color scheme of the guide system received an average score of 3.556 (standard deviation: 1.021), indicating strong approval. Respondents highlighted the importance of applying principles of color psychology to evoke enthusiasm among tourists. They also suggested increasing color contrast and saturation to improve the system's readability and ability to capture visitors' attention.
- **Pattern Design:** Pattern design was rated at an average of 3.530 (standard deviation: 1.069), suggesting high satisfaction. Participants recommended avoiding rigid geometric shapes in favor of chance and abstract forms to create a more calming atmosphere. They emphasized the use of layered combinations for visual depth, as well as balance and symmetry to enhance visual stability and provide effective guidance.
- **Functionality:** The functionality of the guide system received an average rating of 3.527 (standard deviation: 1.000), demonstrating positive feedback. Respondents emphasized the importance of designing guide, cue, and interpretive signage to achieve accuracy, legibility, expressiveness, and universality. These elements are crucial for providing clear and effective directional guidance.
- **Adaptation to Context:** The system's adaptation to local geography, climate, history, and cultural elements was also highly rated. Respondents expressed a preference for a guide system that integrates seamlessly with the area's unique geographic features, climatic conditions, historical narratives, and cultural heritage. They emphasized the importance of representing Guanzhong culture, ethnic and religious diversity, and elements of local folklore and art.
- **Overall Implications:** Respondents demonstrated high expectations for the upgrade of Yuanjiacun's guide system. They anticipate improvements in its appearance, color, pattern design, and functionality to enhance the visitor experience. This feedback serves as valuable input for scenic area managers, providing direction for upgrading the guide system to better align with visitor needs and preferences. Ultimately, these improvements are expected to enhance the overall attractiveness and competitiveness of Yuanjiacun as a tourist destination.

Design Practice and Analysis

In the design of the Yuanjiacun guide system in Xianyang City, careful consideration is given to the strategic placement of guide signs to ensure tourists can easily access necessary information throughout their visit. The signs are positioned at key locations within the village, prioritizing areas with high foot traffic, complex traffic flow, and clusters of attractions. Particular attention is focused on critical nodes, including the village entrance, areas surrounding major attractions, and transportation transition points, to provide seamless guidance and enhance the overall visitor experience.

Feature Extraction of Ma Spoon's Face and Symbolic Fusion Design of the Character "Yuan": The logo design for the Yuanjiacun scenic spot incorporates elements inspired by the unique Ma Spoon face painting of the Guanzhong region. This face painting is used as the primary visual motif on the guide system's carriers. To align the logo with the cultural essence of Yuanjiacun, the design process includes an analysis of the local environment and cultural symbols. Specifically, the Ma Spoon face and the Qin-era character "Yuan," written in small seal script, were selected as key elements.

The design process involves extracting the distinctive lines from the Ma Spoon face, followed by their simplification and reconstruction to create a modern yet culturally resonant form. The reconstructed pattern is then refined and filled to produce a final logo that represents the unique identity of Yuanjiacun. This fusion of traditional cultural elements with modern design principles ensures that the logo not only reflects the heritage of the Guanzhong region but also serves as an effective visual symbol for the scenic spot, as shown in Figure 4, 5, 6, and 7.
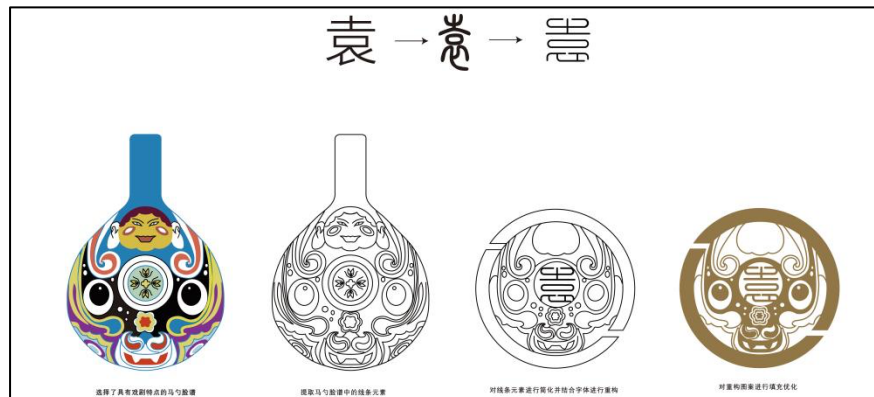

Figure 4. Visual symbol for the scenic spot, designed by the author, 2023

Figure 5. Yuanjiacun scenic spot's logo, designed by the author, 2023

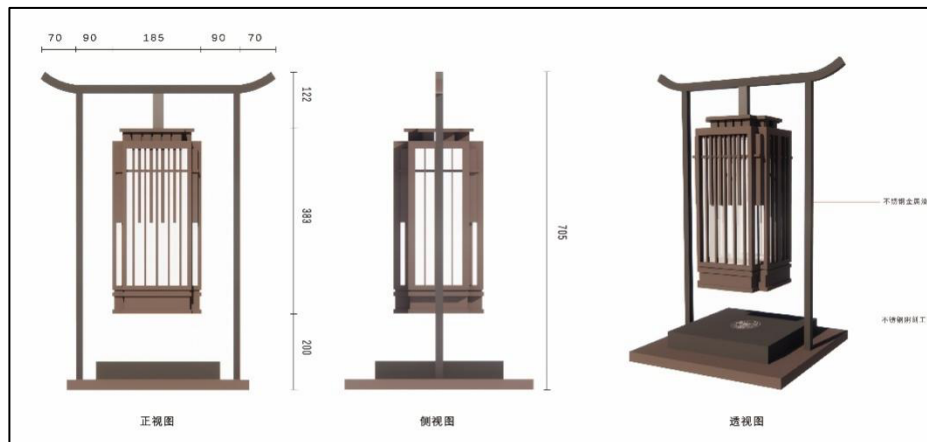**Figure 6.** Yuanjiacun scenic spot general information sign, designed by the author, 2023

Figure 7. Yuanjiacun scenic spot's lantern, designed by the author, 2023

Conclusions and Discussion

The demographic characteristics of the sample provide insights into the composition of respondents and their potential influence on the study's findings. The gender distribution shows a nearly equal split, with females slightly outnumbering males (51.95% vs. 48.05%). This balance ensures that perspectives from both genders are represented, contributing to a comprehensive understanding of the topic.

In terms of age, the predominance of respondents in the 18–30 age group (53.90%) suggests that the findings may reflect the preferences and behaviors of younger visitors more prominently. This is consistent with the assumption that younger individuals may form a significant portion of the tourist demographic at Yuanjiacun, potentially due to their interest in cultural exploration or leisure activities. However, the inclusion of respondents from other age groups adds diversity to the dataset, allowing for the analysis of intergenerational differences in preferences.

The educational attainment data highlights a concentration of respondents with higher education levels, with 37.99% holding undergraduate degrees and 26.62% possessing three-year college qualifications. This distribution indicates a relatively educated sample, which may influence the level of engagement with and expectations for the guide system design. It also reflects a demographic likely to value cultural and informational elements of the scenic spot, providing insights into the design and functionality of the guide system.

The occupational distribution reveals a balanced representation of industries, with the education and training sector forming the largest group at 20.13%. This reflects the diverse backgrounds of visitors and underscores the need for the guide system to cater to a range of professional perspectives and needs. The prominence of the education sector suggests a potential emphasis on clarity, accuracy, and informational value in the guide system design, as this group may prioritize these attributes.

Overall, the demographic composition of the sample is well-balanced, ensuring a representative and diverse basis for analysis. This diversity enhances the reliability of the findings and supports the development of a guide system that accommodates the varied needs and preferences of Yuanjiacun's visitors. Moving forward, these demographic insights will provide a foundation for tailoring the guide system's design to align with visitor expectations and improve their experience.

The evaluation of Yuanjiacun's guide system provides insights into visitor perceptions and expectations, highlighting areas of strength and opportunities for improvement. These findings form a foundation for targeted enhancements aimed at improving the visitor experience and boosting the overall appeal of the scenic area.

The appearance of the guide system received a positive evaluation, with an average score of 3.544 and a standard deviation of 1.033. Respondents emphasized the importance of improving visual appeal to enhance the overall atmosphere of the site. Suggestions included designing ergonomic and proportionate layouts, ensuring visual balance, and maintaining coherent yet distinct line contours. These enhancements are expected to create a more aesthetically pleasing and functional guide system that aligns with the scenic area's ambiance.

Color emerged as another well-regarded element of the guide system, with an average score of 3.556 (standard deviation: 1.021). Respondents underscored the significance of applying principles of color psychology to evoke positive emotions among tourists. Additionally, they recommended increasing color contrast and saturation to improve readability and visual impact, making the system more engaging and easier to navigate, this issue was linked to Waijittragum, P. (2024).

The pattern design aspect was rated at 3.530 on average (standard deviation: 1.069), indicating high satisfaction. Participants suggested avoiding rigid geometric shapes in favor of more fluid and abstract forms to create a soothing and visually appealing atmosphere. Layered combinations were proposed to add visual depth, while balance and symmetry were highlighted as essential for achieving stability and effective guidance. These design elements contribute to creating a visually dynamic and user-friendly guide system.

The functionality of the guide system received an average rating of 3.527 (standard deviation: 1.000), reflecting strong approval from respondents. They emphasized the importance of accurate, legible, and expressive signage that aligns with universal design principles. Guide, cue, and interpretive signs were identified as critical for delivering clear and effective directional information. This feedback underscores the need for a user-centered design approach that prioritizes practicality and ease of use.

The guide system's ability to integrate with Yuanjiacun's local geography, climate, history, and cultural elements was highly rated. Respondents expressed a preference for a system that reflects the area's unique geographic features, climatic conditions, historical narratives, and cultural heritage. Specific mentions included the representation of Guanzhong culture, ethnic and religious diversity, and local folklore and art. This suggests that cultural authenticity and contextual relevance are factors in shaping visitor perceptions.

The findings reveal expectations among respondents for an upgraded guide system at Yuanjiacun. Improvements in appearance, color, pattern design, and functionality are anticipated to enhance the overall visitor experience. The integration of local cultural and historical elements further reinforces the guide system's role as a tool for cultural immersion. These insights provide guidance for scenic area managers in developing a more engaging, functional, and contextually relevant guide system.

By addressing these recommendations, Yuanjiacun can enhance its attractiveness and competitiveness as a tourist destination, ensuring that the guide system meets visitor expectations.

The design of Yuanjiacun's guide system demonstrates integration of functional planning and cultural symbolism, aiming to enhance visitor navigation and reinforce the area's cultural identity. Strategic placement of guide signs in high-traffic areas, complex nodes, and near key attractions ensures accessibility to essential information, improving the overall visitor experience.

The logo design, inspired by the Guanzhong region's Ma Spoon face painting and the Qin-era character "Yuan" in small seal script, reflects a connection to local heritage. The process of extracting, simplifying, and reconstructing these cultural elements into a modern design achieves a balance between tradition and innovation. This culturally resonant logo enhances the visual appeal of the guide system and strengthens Yuanjiacun's identity as a unique and culturally significant tourist destination.

Overall, the guide system's design effectively combines practicality with cultural expression, contributing to a more engaging and meaningful experience for visitors.

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