

Research on the Construction of City Walk Tourism Routes from the Perspective of Cultural Heritage Conservation: A Case Study of Beiyuanmen Historic and Cultural District in Xi'an

Qinghang Cheng

Affiliation:Xi'an University of Architecture and Technology

Email:1992389230@qq.com

Abstract

The immersive tourism model represented by City Walk is reshaping the spatial narrative logic of historic districts. Additionally, the spatial organization of tourism routes faces multifaceted contradictions. Taking Beiyuanmen as a case study, this research employs space syntax analysis to deconstruct spatial morphological characteristics, constructs a supply-demand-balanced cultural heritage display route by integrating GIS-based spatial accessibility simulations with tourist behavior preference mining via social media semantic analysis. The research ultimately develops a heritage conservation-oriented route construction methodology, forming a new paradigm that harmonizes "heritage conservation, tourist behavior matching, and urban form adaptation." This framework aims to provide replicable strategies for revitalizing cultural heritage in historic districts, enhance tourists' recognition of heritage values, and promote sustainable cultural preservation.

Keywords: cultural heritage conservation; historic and cultural districts; City Walk; tourism route

1.Introduction

1.1 Research Background

Within the era of deep integration between culture and tourism and the vigorous development of the experience economy, immersive tourism models epitomised by "City Walk" are rapidly emerging. These models profoundly intervene in and reconstruct the spatial narrative logic of historic districts. This pedestrian practice, emphasizing locality, a slow pace, and deep engagement, theoretically offers opportunities to revitalise cultural heritage and enhance public understanding of a place's historical stratification and cultural diversity. It achieves this by guiding tourists to intimately engage with the fabric of the streets and alleys through physical perception and interactive experience. However, in practice, the high-intensity influx of visitors and consumption-oriented focus spurred by the City Walk trend can readily, in the absence of effective guidance and regulation, catalyse the homogenisation and superficial expansion of commercial activities within historic districts. The rapid proliferation of numerous homogeneous trendy establishments and fast-food style cultural consumption spaces into the original urban fabric not only dilutes the district's unique historical ambiance and cultural authenticity but may also fragment or even distort its inherent historical and cultural context. This poses potential threats and challenges to the preservation environment of physical relics, the continuity space for intangible cultural traditions, and the living networks of local communities. Xi'an Beiyuanmen Historic and Cultural District, as the core area of the Huifang Quarter, bears profound historical sedimentation and distinctive ethnic cultural characteristics, serving as a vital living heritage landmark in the ancient capital of Xi'an. With City Walk increasingly becoming its dominant tourism experience, the pressing challenge is how to systematically design tourism routes that fulfil tourists' demands for deep engagement while effectively safeguarding the core value of the district's cultural heritage. This necessitates balancing commercial vitality with cultural authenticity for the sustainable preservation and development of the area. This research is grounded in this context, aiming to explore strategies for constructing City Walk tourism routes from the perspective of cultural heritage preservation.

1.2 Problem Statement

Three principal contradictions exist within the current City Walk routes of Beiyuanmen: The paradox between heritage display and preservation; The contestation for space between tourists and residents; The imbalance between route design and urban form.

1.2.1 The Paradox of Heritage Exhibition and Preservation

Current spatial organisation practices for tourism routes frequently encounter a profound “heritage paradox”: to enhance visitor immersion and appeal, route design tends to concentrate and intensively showcase core cultural heritage nodes—such as historic buildings, distinctive sites, and traditional activity points—in high-density sequences. However, this intensive, high-frequency exhibition and utilisation of cultural heritage, when lacking refined regulation and carrying-capacity assessment, readily exceeds both the physical load-bearing thresholds and cultural resilience boundaries of the heritage assets themselves and their environments. This manifests in three primary ways: **Material Degradation:** Sustained dense footfall on fragile historic fabric—including ancient structures, pavements, and architectural components—accelerates their wear and even induces structural damage. **Cultural Commodification:** Traditional activities originally rooted in community daily life become simplified, staged, or even alienated into performative spectacles to cater to tourist experience and consumption demands, stripping them of their native cultural context and social function. **Spatio-Temporal Disruption:** Overemphasis on guiding visitors towards specific cultural symbols (e.g., mosques, traditional snack workshops) causes abnormal spatio-temporal clustering of crowds. This not only disrupts residents’ daily routines and the solemn ambience of religious activities but may also displace authentic community functions. Consequently, resolving this paradox by exploring how to achieve synergy between “bearable display” and “dynamic preservation” at the spatial organisation level constitutes the core challenge and critical breakthrough point of this research.

1.2.2 The Spatial Contestation Between Tourists and Residents

The spatial organisation of City Walk routes also acutely instigates a more micro-level and intense spatial contestation within historic districts: an ongoing conflict and struggle between tourists’ demands for immersive experiences and the spatial entitlements of local residents in their daily lives. This contestation extends far beyond mere physical crowding; fundamentally, it concerns the competitive usage and meaning-making over finite, highly valued spatial resources. On one hand, the narrow historic lanes and alleys that serve as the primary conduits for City Walks become inundated with visitors during peak periods. This directly encroaches upon the essential circulation and lingering spaces required for residents’ daily activities—commuting, socialising, goods transportation, children’s play—resulting in reduced mobility efficiency, diminished quality of life, and even safety hazards. Residents are thus compelled to either adjust their routines to avoid tourist surges or relinquish customary uses of public spaces, constituting an invisible erosion of their autonomy over daily life. On the other hand, the pursuit of “authentic” experiences inherent to City Walk often drives tourists to seek out spaces perceived as embodying “local life.” Persistent gazing, photography, and even uninvited close observation not only intrude upon residents’ sense of privacy and security but also risk creating cultural discomfort and imposing secularisation pressures on community sacred spaces. This occurs when tourist behaviour clashes with local cultural customs or religious sensibilities. Consequently, a core challenge in constructing City Walk routes lies in how spatial organisation and visitor flow management can effectively identify, respect, and safeguard residents’ spatial rights. This necessitates seeking a dynamic equilibrium between tourists’ experiential rights and residents’ right to inhabit their living environment, thereby preventing the cultural heritage site from being transformed into a unidimensional tourist consumption space.

1.2.3 Imbalance Between Route Design and Urban Morphology

The prevailing City Walk route organisation model faces a fundamental structural misalignment: a profound disconnect exists between its premeditated, highly linearised touring logic and the intrinsic, organically complex “courtyard-alley-market” spatial morphology and functional organisation of the Beiyuanmen Historic and Cultural District. This imbalance not only diminishes visitors’ perceptual depth but also risks distorting the district’s spatial logic and exacerbating the aforementioned contradictions. **Spatial Scale and Rhythm Conflict:** Beiyuanmen’s charm, honed over centuries of organic growth, lies in its multi-layered, networked, and densely collaged spatial fabric. This fabric emerges from the interplay of narrow winding alleys, inwardly focused courtyard units, and spontaneously evolved mixed-use market nodes. However, many City Walk routes—designed for efficiency and “check-in” coverage—over-simplify or artificially straighten this natural grain, imposing one or more clear, coherent, directionally explicit, and relatively broad touring arteries. This artificial linearisation concentrates pedestrian flows and commercial opportunities excessively along these primary routes, marginalises second-

any alleys and courtyard entrance spaces that harbour authentic living scenes and cultural nuances, Deprives visitors of serendipitous discovery through autonomous exploration and “getting lost,” Inhibits nuanced perception of micro-spatial layers and comprehension of the district’s holistic organicity. Functional Disruption of the “Courtyard-Alley-Market” Organism: The district’s “courtyard-alley-market” structure is inherently an organic entity where three functions—residential courtyards, social circulation alleys, and commercial market spaces—are spatially nested and dynamically balanced. Linear routes reduce this complex system to a “consumption conveyor belt,” funnelling visitors rapidly from one commercial point to the next. This undermines the route’s potential function as a framework for understanding the district’s: Historical stratification, Social structure, Underlying spatial logic. Consequently, transcending simplistic linear sequencing to explore a route organisation model that: Is grounded in the “courtyard-alley-market” archetype, Respects the inherent networked spatial character, Encourages non-linear exploration and multi-layered perception,—is essential for constructing City Walk routes that genuinely align with cultural heritage preservation objectives and profoundly activate the district’s distinctive appeal.

1.3 Research Aims

Building upon a critical analysis of Beiyuanmen Historic and Cultural District’s core challenges under the City Walk phenomenon—namely the paradox of heritage exhibition versus preservation, the spatial contestation between tourists and residents, and the misalignment between route design and urban morphology—this research aims to transcend conventional tourism route planning paradigms. It seeks to move beyond singular efficiency-oriented approaches or static preservation mentalities by constructing a City Walk route system centred on the synergistic trinity of “Heritage Preservation – Tourism Experience – Community Coexistence”. This system constitutes not merely a spatial superimposition of routes, but an adaptive framework integrating multidimensional elements, including: Spatial organisation, Activity programming, Interpretative information, Management and regulation. Its fundamental objective is to achieve, within the context of Beiyuanmen—a characteristic high-density, living, dynamic, multi-ethnic historic district—a dynamic equilibrium and long-term mutual reinforcement between: The sustainable safeguarding and transmission of cultural heritage, and The high-quality development of tourism.

2. Literature Review

2.1 Cultural Heritage Preservation and Tourism Utilisation

The preservation and rescue of cultural heritage constitute a vital component of human civilisation and strategies for sustainable societal development, representing a collective societal obligation. Presently, China faces issues such as constructive damage and tourism-induced degradation in the balance between protecting cultural heritage and its exploitation for tourism purposes (ZHENG Xiaoxie). As historic districts, primarily valued for their historical and folk-cultural resources, become highly sought-after tourist destinations, scholars like YANG Guosheng caution against prioritising economic gains from tourism utilisation at the expense of damaging cultural heritage under the guise of economic development. Consequently, the regenerative utilisation of cultural heritage aims precisely to re-establish cognitive or emotional connections between the general public and heritage assets, enabling heritage to represent the identity of non-authoritative stakeholders, including residents and tourists; moreover, enhancing heritage tourism experiences can be regarded as a key metric for successful regenerative utilisation (ZHANG Jianwei). Building upon this, scholar ZOU Han proposes the concept of the “heritage trail,” a regional linear cultural heritage conservation method applicable to smaller-scale historic areas. This involves planning and constructing tourist routes that link and integrate multiple cultural heritage resources, establishing visitor nodes and providing services. Similarly, “cultural routes” and “heritage corridors” emphasise the historical and cultural value of heritage while prioritising balance with economic benefits and socio-environmental value, though operating at larger scales. The former typically spans regions or nations, connected by cultural dissemination and dialogue, whereas the latter, operating at an intermediate scale, often integrates cultural resources to form linear landscapes connecting urban clusters or cities. This represents a lower-intensity tourism development approach, suitable for protection strategies involving “temporary retention, refurbishment and appropriate facility addition” within historic areas, exerting minimal impact on local livelihoods and lifestyles.

2.2 The Spatial Narrative Turn in City Walk

Spatial narrative, a method that combines a structural system of events arranged along the axis of time and causal logic with a spatial juxtaposition system characterized by coexistence and synchronicity, is described as a 'spatiotemporal complex.' (Xiao Jing) argues that current cultural heritage protection is increasingly showing a trend towards narrative and cognitive spatiotemporal positioning. The goal of protection is to restore abstract history and humanistic values to a complete spatiotemporal entity through the integration of spatial and landscape remains and their associated texts, allowing people to more intuitively, deeply, and systematically perceive, understand, and grasp the traces and interconnections left by human activities in both the spatiotemporal and conceptual worlds. Specific methods: On one hand, (Zhuang Xiaoping) developed a 'value cognition depth map' using 'historical richness' and 'time depth' as indicators to quantitatively assess the value of ancient city heritage. On the other hand, (Li Yuan) identified visual preference as the key factor influencing tourists' decision-making and proposed a method for simulating pedestrian flow and optimizing tourist routes [1]. Thus, the spatial narrative shift initiated by City Walk is not merely an innovation in tourism products but a profound transformation in the perception and revitalization of historical districts. Using 'walking 'as a medium and' narrative' as a link, it creatively integrates the spatial elements of cultural heritage with the needs of tourism development in a dynamic cultural experience space.

3. Methodology

3.1 Research Area

The Beiyuanmen Historical and Cultural Block, located in the northwest of Mingcheng District, Xi'an, is the area with the highest concentration of Muslim residents in Xi'an. Having experienced development from the Tang, Song, Yuan, Ming and Qing Dynasties to modern times, it preserves still the traditional 'seven temples and thirteen wards' layout of the Ming and Qing periods. The public spaces within the block, shaped by historical layers across different eras, have gradually formed the current appearance of the block. These public spaces are living elements that have continuously evolved in the daily lives and activities of Muslim residents. The existing types of public spaces mainly include public buildings (such as the Drum Tower, the City God Temple), mosques, and historical lanes.

3.2 Data Sources

Spatial data: CAD topographic maps, POI (Points of Interest) data.

Behavioural data: Over 200 travel notes from social media were selected by searching keywords like 'Beiyuanmen' and 'city walk' on Xiaohongshu. The places where visitors frequently appear in their daily routines are ranked as Shajin Bridge, Beiyuanmen, Guangji Street, North Guangji Street, Dapi Courtyard, Xuexi Alley, Muslim Street, Miao Hou Street, Gao Family Courtyard, Xi Yang Market, Huajue Alley, Xiaopi Courtyard, Great Mosque, Bell Tower, Xiaoxue Alley, Damai Market Street, Guangming Alley, Mai Xiang Street, Huajue Alley Mosque, Xuexi Alley Mosque, Bell and Drum Tower Square, Lianhu Park, and Hongbu Street. The main purposes for visitors to enter the block are to experience the food, history, Islamic culture and the local atmosphere.

3.3 Technical Framework

This study applies a progressive technical route of spatial computation - behaviour sensing - semantic mining - intelligent optimisation. By integrating multi - source data and coordinating multiple models, it accurately analyses the spatial genes of the Beiyuanmen block, tourist behaviour patterns, and cultural cognition characteristics. Thus, it offers scientific evidence for creating a City Walk path system that integrates heritage conservation, tourist experiences, and community coexistence. Firstly, using the depthmapX platform to construct a block axis model and calculate key indicators to precisely identify the disharmonious areas between current paths and the block's natural texture. Secondly, in ArcGIS10.6 software, based on social media geographical tags and field observation points, applying kernel density estimation to generate tourist spatial aggregation heatmaps. Overlaying the distribution of heritage itself and local residents' living service facilities to visually present heritage display and commercial homogenisation expansion hotspots. Then, utilising travel notes published on social media to extract the main subjects tourists focus on, conducting visual - association to identify cultural cognition breakpoints and reveal tourists' perceptual blind spots of the block. Finally, performing multi - objective constraint optimisation of the historical and cultural block City Walk path.

4. Results

4.1 Spatial Form Characteristics

This study uses axial analysis and segment analysis. Axial analysis assesses the integration and connectivity of the Beiyuanmen Historical and Cultural Block, while segment analysis evaluates the selection of streets within the block. To begin, the research defines the spatial boundary. It extracts the street network of the block using CAD software based on the current situation, simplifies it to straight lines, exports it as a dxf - format file, and finally imports it into Depthmap software for spatial analysis of the block.

Integration, a key indicator of space syntax theory, reflects the accessibility of nodes in a spatial system and the closeness of their connections. It indicates the total steps needed to traverse all nodes from a starting point. A higher integration value signifies greater street accessibility. In the Beiyuanmen Historical and Cultural Block, Guangji Street has the highest integration, followed by Hongbu Street and Miao Hou Street. These streets are the most visited due to their excellent accessibility. Choice, the frequency a space appears on the shortest topological paths, is closely related to traffic potential. A higher choice value means more traffic and greater potential to attract people and vehicles. Some areas with high choice values but low integration are essential for local residents' daily activities, leading to their high traffic despite lower integration. Connectivity, the number of nodes connected to a specific node, indicates the spatial connections. Guangji Street has the highest connectivity in the block, followed by Xi Street, Hongbu Street, and Miao Hou Street. Other streets have lower connectivity due to numerous "T" intersections, causing traffic disruption and visual obstruction.



Figure 2-1 Integration



Figure 2-2 Choice



Figure 2-3 Connectivity

4.2 Heritage Perception Characteristics

The hotspots for heritage perception in the Beiyuanmen Historical and Cultural Block include historical and cultural heritages such as the Drum Tower and Guangji Street, as well as historical lanes with rich culinary culture like Xi Yang Market and Shajin Bridge. The City God Temple and Huajue Alley Great Mosque in the block attract a small number of tourists, while other cultural heritages are less known. Areas such as Qiaozikou, Damai Courtyard, Xiaopi Courtyard, and Hongbu Street, along with other mosques, are cold spots for heritage perception and are mostly visited by tourists seeking an in - depth experience of the local cultural atmosphere.

Firstly, this study conducted a Kernel Density Analysis of POIs in the Beiyuanmen Historical and Cultural Block, covering cultural heritage, public facilities, daily services, shopping, leisure, and dining services that cater to both residents and tourists. The results show that residents' daily and leisure services are mostly marginalised into non - core peripheral areas due to tourism - related space encroachment, with only a few shared public facilities evenly distributed. Tourists' activities mainly focus on historical lanes and cultural heritage sites, leading to a proliferation of shopping and dining services along these streets, which in turn crowds out residents' living spaces. Specifically, shopping services are concentrated in Beiyuanmen, Xi Yang Market, and North Guangji Street, near the Bell and Drum Towers, attracting tourists who mainly engage in superficial sightseeing. Dining services are mainly found in North Guangji Street, Shajin Bridge, Dapi Courtyard, and Miao Hou Street, which are more integrated into the local community and attract tourists seeking an in - depth experience. Secondly, through an analysis of travel notes posted on social media, including a word frequency analysis, it was found that the most frequently mentioned locations by tourists are "Shajin Bridge" and "Beiyuanmen", representing the block's culinary and cultural heritage highlights respectively. Other keywords often mentioned by tourists are related to various foods, reflecting the block's strong appeal to tourists through its ethnic culinary culture. Additionally, many historical lanes within the block are frequently mentioned, indicating that each lane has its own unique characteristics and points of interest, such as Guangji Street's culinary attractions and Beiyuanmen's shopping spots. Furthermore, an analysis of the correlations within social media travel notes reveals that tourists are particularly interested in experiencing the atmosphere of Xi'an's indigenous historical lanes. Several historical lanes and culinary elements are closely watched by tourists. Currently, the tour routes within the Beiyuanmen Historical and Cultural Block are closely related to historical and cultural heritage, historical lanes, and culinary culture.

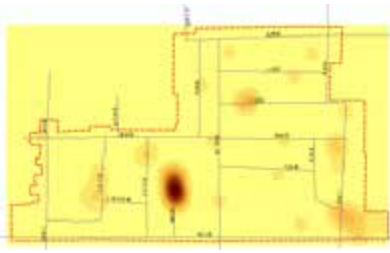


Figure 3-1 Cultural Heritage



Figure 3-2 Public Facilities

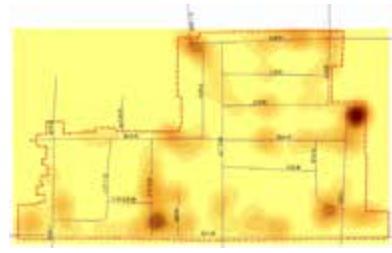


Figure 3-3 Life Service

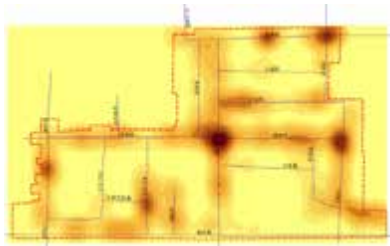


Figure 3-4 Shopping Services

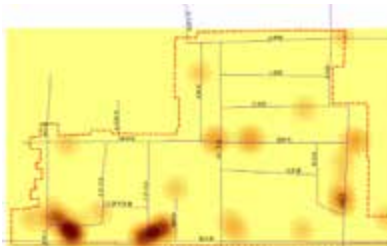


Figure 3-5 Recreation Services

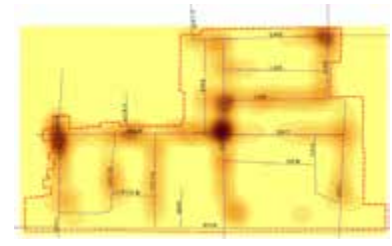


Figure 3-6 Dining Services

Figure 3 Service Facility Analysis of Beiyuanmen Historical and Cultural Block



Figure 4 Social Media Travelogue Text Word Frequency Analysis

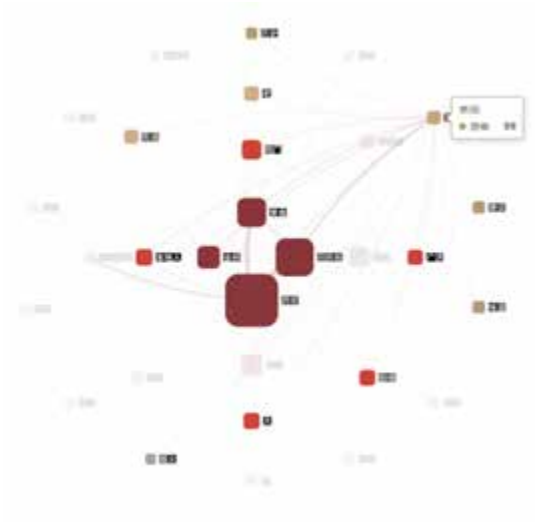


Figure 5-1 Tourist Relevance Analysis

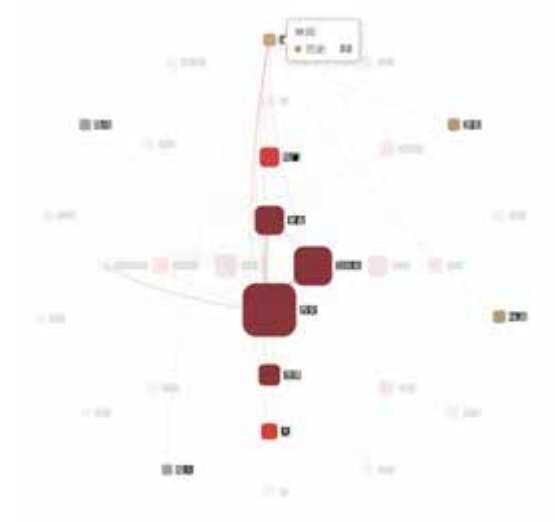


Figure 5-2 Historical Relevance Analysis

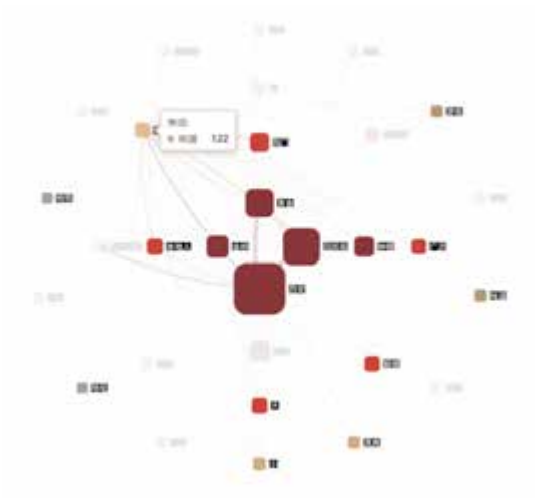


Figure 5-3 Street Relevance Analysis

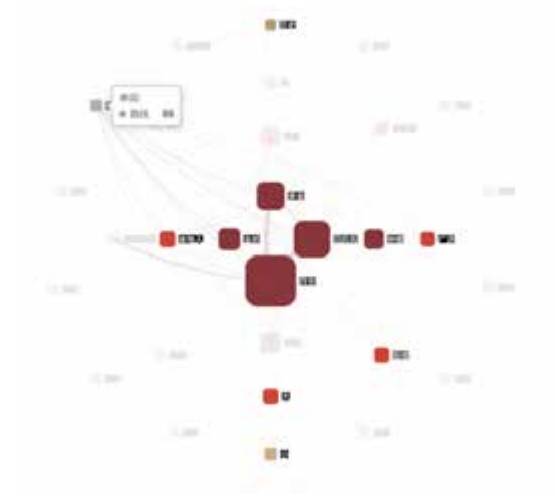


Figure 5-4 Route Relevance Analysis

Figure 5 Social Media Travelogue Text Relevance Analysis

4.3 Route Optimisation Plan

This paper proposes a “double loop” system for the City Walk tourist route in the Beiyuanmen Historical and Cultural Block. The main loop links core heritage sites, while the micro loop offers an in - depth experience within residential courtyards. The main loop, combining cultural heritage and halal food experiences, starts at the Drum Tower and follows a circular route. It links the “seven temples and thirteen wards” spatial pattern, enhancing the historical block’s spatial experience. About 2.5 km long, it takes 2 - 3 hours and covers 90% of core resource spots. The main loop starts at the Drum Tower, goes through Huajue Alley, Xi Yang Market, Beiyuanmen, Gao Family Courtyard, Miao Hou Street, City God Temple, and back to the Drum Tower. Along the way, there are cultural spots like the Huajue Alley Mosque and Gao Family Courtyard. For food, places like Jia San Guan Tang Bao and Shaanxi Thirteen are included. Eco - friendly facilities like solar - powered charging seats are also available. Themed routes are offered at different times, integrating scattered historical fragments into a circular path for a hands - on experience of the block’s cultural genes. There are two micro loops. One is the community culture experience route on the northeast side. It starts at Guangji Street, goes through Xiao Pi Courtyard, Mai Xiang Street, Beiyuanmen, and the Drum Tower, allowing participation in community activities and experiencing the halal community culture. The other is the halal food culture experience route on the west side. It starts at Guangji Street, goes through Miao Hou Street, Da Mai Market Street, and Shajin Bridge, where tourists can taste the food of century - old shops.

5. Discussion

5.1 Balancing Heritage Protection and Display Mechanisms

As a traditional settlement area in Xi’an Mingcheng District with distinctive local features, the Beiyuanmen Historical and Cultural Block preserves historical spatial texture since the Tang Dynasty and carries unique Hui Fang ethnic culture and market life traditions. The City Walk route aims to balance heritage protection and public display, and resolve the conflict between protection rigidity and utilisation flexibility. Core protection zones, covering sites like the Gao Family Courtyard and Huajue Alley Mosque, follow the minimal - intervention principle, focusing on static display and cultural interpretation. Style - coordination zones, including Ming and Qing streets like Xi Yang Market, allow moderate commerce but with strict business control, aiming for themed commercial experiences. Update - transition zones involve other general streets, which undergo minor changes to embed cultural spots. Also, to prevent tourist overcrowding on main streets, themed routes guide visitors to secondary streets. This spatial - temporal narrative reconstruction of cultural understanding eases core zone pressure and activates the block’s heritage value.

5.2 Community Participation Implementation Path

The sustainability of heritage protection and display relies on community residents shifting from “managed objects” to “main participants”. Beiyuanmen Block has designed multi - level and practical implementation paths for social participation to establish a real “bottom - up” co - governance mechanism. This ensures residents are not only cultural inheritance carriers but also decision - makers, interpreters, and beneficiaries of tourist routes. Firstly, local residents are recruited as City Walk guides to share their personal memories of the block’s evolution, enhancing visitors’ cultural experience. Secondly, intangible cultural heritage workshops are set up. With small scale, appointment - based, and in - depth interaction principles, these workshops avoid performance and commercialisation, aiming to restore historical scenes of value and offer deep cultural exchanges. Lastly, local shops are certified. Those using traditional crafts and highly rated by visitors and residents are added to the City Walk recommendation list. This safeguards the block’s cultural authenticity against mass tourism and strengthens visitors’ identity recognition during travel interactions.

6. Conclusion

Through integrated and innovative adaptive spatial strategies for high - density multi - ethnic blocks, this study builds an assessable, operable, and promotable City Walk route planning and management paradigm. First, it resolves the heritage protection - development paradox by suggesting a mechanism. Second, it reconciles tourist - resident spatial games to safeguard community spatial rights. Third, it bridges the route - spatial - form gap, creating an embedded network route. This paradigm serves Beiyuanmen Block’s sustainable development and offers theory and practice references for similar global heritage sites, proving protection and development

can be dynamically balanced and mutually reinforcing through smart spatial interventions. However, given the unique spatial forms and routes of historical blocks with different cultural attributes, City Walk planning and management must be tailored to each block's specific characteristics.

References

Journal article:

Zheng, Xiaoxie (2003) Enhancing the Protection of China's World Heritage Sites and Preventing the 'Endangered' Problem (Speech at the 'World Cultural Heritage Conservation, Management and Utilisation Seminar' on October 25, 2002). *Urban Development Studies*, (02), pp. 50-54.

Yang, Guosheng, Long, Bin and Qin, Jimu (2012) 'Nine Views' on the Protection of Historical Blocks and the Scientific Tourism Utilisation in China. *City Planning*, 36 (09), pp. 91-96.

Zhang, Jianwei, Gao, Jun, Wang, Xiongzi, et al. (2020) Heritage Values, Protection, Utilisation and the Subject - centred Discussion - the First Heritage Tourism Joint Workshop. *China Cultural Heritage*, (01), pp. 45-56.

Zou, Han and Shi, Liu Ruitian (2014) Research on the Protection and Renovation of Historical Areas Based on Heritage Tourism Routes. *Huazhong Architecture*, 32 (03), pp. 154-157.

Xiao, Jing and Cao, Ke (2013) Spaces That Narrate History - The Application of Narrative Techniques in the Spatial Planning of Historic City Protection. *Planners*, 29 (12), pp. 98-103.

Huang, Jingxiong, Li, Yuan, Liang, Jiaqi, et al. (2024) A Study on Crowd Simulation and Tourist Route Optimisation Based on Visual Preferences - A Case Study of Gulangyu Island. *Tourism Tribune*, 39 (06), pp. 85-100.