

Research on the Micro-Renewal of Street Space Vitality in Mituosi Road Block Based on Space Syntax

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Abstract. With the rapid development of China's new urbanization construction, urban construction has gradually shifted from the traditional incremental planning to the stock planning that pays more attention to the utilization of existing resources. In this process, the renewal and development of urban historical blocks has become an important problem to be solved urgently. The traditional largescale transformation method is often difficult to take into account the cultural heritage of the historical block, and the "micro-renewal" method with the street space as the main body is considered to be one of the effective ways to inherit the cultural context of the block. This paper takes the historical streets and lanes of Mituosi Road in Hangzhou, Zhejiang Province as the research object, and takes "space-vitality" as the core. The historical streets and lanes of Mituosi Road are selected and their spatial structure is quantitatively analyzed by means of space syntax, including integration, connectivity and other indicators, and the "spacevitality" and renewal methods of the historical streets and lanes of Mituosi Road are evaluated. On this basis, a series of planning strategies for the street space of historical blocks are put forward, including the construction of characteristic street space, infrastructure construction and safety, the creation of harmonious street landscape, the excavation of night economic potential, and the integration of Hangzhou cultural heritage. The research results show that through the implementation of "micro-renewal" of streets and lanes, the sustainable development of historical blocks can be effectively realized, the urban context can be continued, and useful reference can be provided for urban construction under the background of new urbanization.

Keywords: space syntax, historical district, street space, micro-renewal

1 Introduction

A significant component of the urban setting is the historical block. It not only documents the evolution of urban development but also preserves the collective memory and distinctive features of urban areas. The streets, buildings, and open areas within these blocks frequently amass a wealth of historical and cultural significance, mirroring

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the social characteristics and lifestyles of several historical periods. In addition to serving as a reminder of the city's past, the historical area serves as a link between it and the future. Preserving and modernizing these blocks is crucial to upholding the city's cultural legacy and augmenting its allure and competitiveness.

This essay defines the historic district's vitality as the quantity of people using a certain area. More broadly, vitality is demonstrated by the healthy and dynamic functioning of the entire city as one large system, which has the capacity to draw in and release outside stimuli, greater specifically, vibrancy is the result of greater opportunities in urban life, or the variety of activities created by the interaction of street space and daily life in historical and cultural blocks. The diversity of street activity, which breathes rich and vibrant urban life into historic blocks, is the fundamental source of this vitality. The historic district is a lively urban area with an energetic ambiance that is directly influenced by the diversity of street life. The customary preservation and revitalization approach for historic districts typically fosters the blocks' vibrancy and sustainable growth through new commercial ventures, functional changes, and the addition of tourism and recreational amenities. Giving ancient residential buildings new uses while preserving their structure and appearance is known as functional transformation. Examples of this include converting them into cafes, art exhibition spaces, or studios for the arts. This model not only preserves the historic buildings' physical shape but also infuses them with fresh life. By introducing suitable commercial and tourism formats, the implementation of new commercial development, tourism, and leisure activities will boost the block's economic vitality and draw in more visitors and investors, thereby encouraging the block's overall rejuvenation.

Zeng Qi previously said that Beijingers' thought processes were greatly influenced by the Hutong culture of ancient Beijing. By comparison, the personality traits of the Hangzhou people are also vividly reflected in and represented by the street culture of Hangzhou. The fundamental structure of historical blocks, the focal point of their cultural environment, and a significant location for everyday life for locals are the streets. It has a significant and broad effect on how historical blocks are arranged spatially. Historical block streets are typically more secluded and walled off. Its primary purpose is to effectively organize and carry out a variety of city tasks by integrating the many components inside the historical blocks into an interconnected whole in space. For instance, roadways serve as both the primary location for organizing urban living space and the means of mobility. Since streets retain a great deal of historical memory and evidence of social interaction, maintaining them is essential to maintaining the urban context. It is especially crucial to research and put into practice the "micro-renewal" technique in order to prevent the detrimental effects of excessive commercialization as well as large-scale destruction and construction. "Micro-renewal" emphasizes smallscale, progressive renewal based on the preservation of the original spatial structure and people' way of life. It focuses on the painstaking restoration and enhancement of existing street and lane spaces. To the maximum extent feasible, this strategy can maintain the way of life of the original occupants, encourage the sustainable development of historical districts, and avert cultural rifts and community disintegration brought on by

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extensive development. Historical blocks can coexist peacefully with modernity by sustaining their distinct cultural appeal and social vitality through "micro-renewal" during the modernization process.

2 The Overall Spatial Morphological Characteristics of the Historical Block of Mituosi Road

2.1 Scope of Research

This study uses the historic streets along Mituosi Road as its research subject with the goal of investigating the objective laws governing each index on vitality and doing a thorough analysis of the elements impacting the region's vitality. The West Lake District of Hangzhou City, Zhejiang Province, is where you can find the Mituosi Road. It crosses the stadium road in the north and begins at the provincial government road in the south. On the side of the road are old Mituosi Temple buildings. The historical block of the Mituosi Road, which has a total area of roughly 34 hm², is the basis for the research. It includes the West Ring Road from the east, the Baochu Road from the west, the Provincial Government Road from the south, and a connection to Stadium Road in the north(Fig.1).



Fig. 1. Location map of Mituosi Road Historic District.



Fig. 2. Main streets and surrounding business circle of Mituosi Road Historic District.

2.2 Current Situation

The Southern Song Imperial Street and Hefang Street, two popular tourist destinations, are in close proximity to the ancient alley of Mituosi Road, which is situated in the city center. Its position is advantageous due to its proximity to the Hubin Business District, Wulin Business District, and Hangzhou Baishaquan M&A Financial District (Fig.2). In addition to being a popular destination for tourists, Amitabha Temple Road is a vital hub for locals to congregate and live. The block is home to a number of public spaces and community activities, including community centers and tiny squares, which offer rich public services and strengthen neighborhood ties. It can be seen that the historical street of Mituosi Road is a comprehensive historical block with tourism function, public nature and consumption significance, which is of great research value.

The name of a temple-related location in Hangzhou is Mituosi Road. Hangzhou is referred to as the "Buddhist Kingdom of the Southeast" and is a prosperous center of Buddhism and Taoism. While it contributed to the upholding of feudal rule, it also deeply influenced place names, creating a significant number of place names that are named after temples, Taoist temples, and ancestral temples[1]. No. 533, Beishan Street Stadium Road, Xihu District, Hangzhou is the address of Mituo Temple Park. It's a cultural park constructed in 2013 on the foundation of the Mituo Temple Site under the three-level linkage of Zhejiang Province, Hangzhou City, and Xihu District. It stretches from the Mituo Temple Road in the west to the Mituo Mountain in the east, the Stadium Road in the north, and the provincial gas station in the south. One of the four principal temples in Hangzhou City during the late Qing Dynasty and early Republic of China is the Mituo Temple structure. The Mituo Temple, which gained notoriety for its enormous stone sculptures of the "uddha saying the Amitabha Sutra", eventually turned into a shanty community as a result of social and historical shifts. The greening and associated work was finished in April 2016, while the renovation project was formally started in September 2015(Fig.3) finishing the conversion into an urban cultural park within the framework of building a stunning town with a sense of place, history, and distinctive features from around the country. As a result of the Amitabha Temple's stone sculptures and its overall appeal, pilgrims from Jiangsu, Zhejiang, and Shanghai began to come here on a regular basis to worship the Buddha and burn incense. Several stores offering Buddhist materials also established up shop here. Over time, a busy road known as Amitabha shrine Road grew up around the shrine. The subsequent map showed the low stone mountain next to Mituo Temple, which was dubbed Mituo Mountain instead of the original term, the unidentified mountain.

The Hangzhou Municipal People's Government announced the Hangzhou municipal cultural relics protection unit protection scope and construction control zone in 2017, and the Hangzhou Municipal Government listed the following areas: east to the mountain's foot on the east side of the mountain; south to the red line of the road on the north side of the Mituosi Road and the mountain foot; west to the red line of the road on the east side of the planned green space; and north to the protection of the scope of the expansion of about 90 meters to the foot of the mountain. There are currently 8 residences in the park, each with an approximate building area of 2972 square meters and an overall area of 10,000 square meters[2]. Based on the successful preservation of

historical structures and cultural artifacts, the Mituo Temple Park, in conjunction with the Mituo Temple's past, the pine site, and the exhibition of Buddhist culture, not only enhances Hangzhou's historical and cultural landscape but also gives its residents a more humanistic feel. (Fig.4) The stone carvings of the Mituo Temple will be revitalized and able to perform their distinctive cultural roles and social impacts as a result of the current development of the Mituo Temple Park.

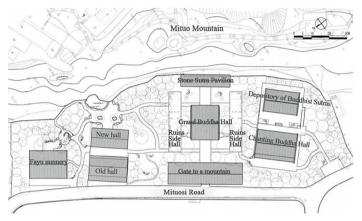


Fig. 3. Plan of the Amitabha Temple Park[3].



Fig. 4. The huge stone carving of "The Amitabha Sutra" after the renovation.

3 Selection of Evaluation Index of "Space-Vitality" Street Space Vitality of Mituosi Road

3.1 Evaluation Model

We can see that the vitality of urban space is primarily reflected in aspects like population density and traffic flow, and is related to factors like the accessibility of the block, the spatial structure and form of the block, the traffic organization of the internal streets, and the functional business formats within the block, from the definition and analysis of urban and block vitality by scholars like Jane Jacobs. As a result, this study developed an evaluation model for historical block vitality and its contributing elements.

When tourists visit the old alleyways and lanes on Mituo Temple Road, they usually enter at the entrance and proceed with caution, following the signs posted on the sidewalk and the buildings on either side. They head into the stores for amusement and shopping while taking in the view. As a result, the road serves as a vital conduit for tourists to use in the lanes and streets. Consequently, this article first utilizes AutoCAD software to build the internal road axis map of Mituo Temple Road based on the design of Mituo Temple Road in Baidu Map. Next, it feeds the modeled road axis data into Depthmap software for spatial syntactic analysis, yielding the following primary indicators.

3.2 Integration

Another name for integration is integration, which has two categories: local integration and global integration. It primarily depicts the level of node aggregation inside the system, the accessibility and connectivity between local and system space, and the degree of axis relationship. An axis's integration increases with the degree of relationship it has with other axes[4]. The axis's hue gets warmer and the spatial structure's accessibility increases with increasing integration.

When analyzing axis integration, "global integration" is typically represented by Rn, which stands for the central location of a particular axis in the system and denotes the degree of connection between the local axis and all other axes in the system. The degree of connectivity between one axis and other axis spaces within a finite number of steps is indicated by the local integration degree. The degree of centrality inside a given range is mostly reflected by the local integration degree.

3.3 Selection

Selectivity is the likelihood that foot traffic in a community chooses a particular area. There are two types of distance selection degrees in reference unit selection: angular and metric. The reference unit is set to 100 meters, which is the ideal walking distance for tourists on Mituosi Road.

4 Syntactic Interpretation of the Spatial Characteristics of Streets and Lanes in the Historical District of Mituosi Road

4.1 Analysis of "Space-Vitality" of Mituosi Road Historic District under the Theory of Space Syntax

In order to get the integration and selection data for the streets inside Mituosi Road, the created CAD line segment model is first loaded into the Depthmap program. In order to help with route planning and adjustment within the Mituo Temple Road historical

block, an overall comprehensibility evaluation of the block is obtained. This evaluation is combined with the current business formats within the streets and alleys, combined with the quantitative data results under the integration and selectivity indicators.

Selectance. Figure 5 displays the street selection analysis diagram of the historical block of Mituosi Road (at various distances). The diagram illustrates the selection of streets or regions in spatial syntactic analysis at various distance scales. We can intuitively observe the frequency with which each area or street is chosen as the shortest way in the range of 100 meters, 200 meters, and 500 meters by using the three indicators labeled "Choice R100 metric", "Choice R200 metric", and "Choice R500 metric". "High" and "low" color strips naturally show the variation in this selectivity. The street's "high" rating denotes its high selectivity and significance as a hub for both traffic and people. Conversely, "low" denotes a relatively low selectivity, which could be far away or challenging to reach.

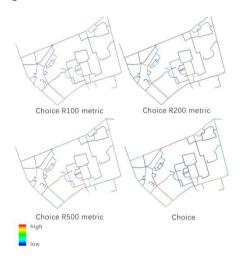


Fig. 5. Analysis of street selection in Mituosi Road Historic District (under different distances).

	Choice R100	Choice R200	Choice R500	Choice Rn
Average value	17.0744	75.6	437.488	1365.24
Maximum value	87	0	4391	0
Minimum value	0	435	0	5832

Table 1. Analysis table of street selection degree of Mituosi Road Historic District

Table 1 displays the roadway choice degree analysis table for the Mituosi Road Historic District. The street selection data in the spatial syntactic analysis of the historical block of Mituosi Road shows the traffic mobility distribution and possible flow attraction inside the block. The streets within varying walking distances (100, 200, and 500 meters) are represented by the three indicators of Choice R100, Choice R200, and Choice R500.

While the maximum value of Choice R100 reaches 87, indicating that there are a few key streets with a high degree of choice in a short distance, which is an important node for pedestrian flow, the average value of Choice R100 is 17.0744, indicating that most streets are not the preferred path for pedestrians in very short walking distances. The average value of Choice R200 rose to 75.6, suggesting that as the walking distance grew, more streets became available for pedestrians to choose from, demonstrating a certain level of accessibility and connection inside the block. But the lowest value was 435 and the greatest value fell to 0, suggesting that there was a substantial variation in the selection of streets within a medium walking distance. With a longer walking distance, Choice R500's average value jumped dramatically to 437.488, further demonstrating the block's better overall connection and accessibility. The stark difference in street preference within the block—that is, certain routes become popular options for long-distance walking while others are comparatively deserted—is highlighted by the enormous difference between the greatest value of 4391 and the minimum value of 0.

In conclusion, it is evident from the table data how different and intricate the streets are in the historical block of Mituosi Road with regard to selection. This distinction indicates the path for the ensuing "micro-renewal" method in addition to serving as a crucial point of reference for traffic planning within the block. It can effectively boost the development and vitality of the entire block by making the streets with limited selection more attractive and accessible.

Integration. Figure 6 displays the street integration analysis diagram of the Mituosi Road Historic District (under varying distances). The diagram illustrates the street or regional integration under varying spatial scales in the context of spatial syntax analysis. It is evident from the three indicators—R100, R200, and R500—that the integration of streets or areas varies as spatial scale increases. Each index is represented in the graphic by a distinct color, and the degree of integration is shown by the labels "high" and "low", which intuitively indicate which regions are more accessible and aesthetically pleasing and which are less so. This provides a scientific foundation for urban planning and design.

Table 2 displays the street integration degree analysis table for the Mituosi Road Historic District. The degree of street integration, which reflects the street's centrality and allure in the overall spatial structure, is a crucial indication to gauge the degree of spatial mutual penetration and integration in the spatial syntactic study of Mituosi Road's historic area. The integration of streets in various spatial ranges is represented by Integration R100, Integration R200, Integration R500, and Integration Rn (assuming that Rn indicates a bigger spatial scale).

The block's general integration degree is rather low at smaller spatial scales (such as within a radius of 100 meters), although some streets nevertheless exhibit significant levels of integration (maximum 27.75), as indicated by the average value of Integration R100 of 11.95. These routes are very visible and accessible in the neighborhood and are hubs of activity for pedestrians. The average Integration R200 value rose to 15.7 as the spatial scale expanded, suggesting that the block started to exhibit some degree of integration over a wider range. A small number of streets with significant integration at the

medium spatial scale, which serve as important nodes linking various locations, are indicated by the maximum value of 31.37. Nonetheless, certain streets are comparatively isolated at this size, as evidenced by the minimum value of 3.47, which also shows a substantial variation in the level of integration within the block. The average value grew to 25.47 under Integration R500, indicating more improvement in the block's overall integration at a bigger spatial scale. The wide disparity between the lowest value of 4.32 and the largest value of 43.74 highlights the complexity and diversity of street integration inside the block once more. High levels of integration preserve excellent long-distance visibility and accessibility, which is a key factor in the vibrancy of blocks. The average Integration Rn value of 45.05 indicates that the block's overall integration has increased to a higher degree across a wider spatial scale. The maximum value of 62.96 shows that, in the center and focal point of the block, there are relatively few streets with exceptionally high integration over the entire block and even in a wider range. Even at a greater spatial scale, the minimum value of 24.47 suggests that there is still some degree of integration difference within the block.

To summarise, the table data displays the distribution of the street integration degree at various spatial scales within the historical block of Mituosi Road. Streets with minimal integration are generally abandoned and require "micro-renewal" to increase their appeal and accessibility. In contrast, highly integrated streets are vital to blocks and hubs for pedestrian activity. By maximizing the street's spatial layout and enhancing the surrounding environment, block renewal initiatives seek to enhance the block's overall vibrancy and sustainable development. This study serves as a crucial foundation for these efforts.

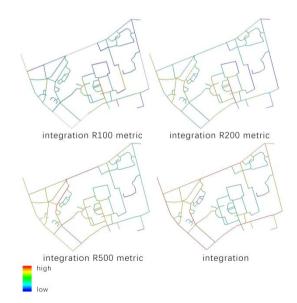


Fig. 6. Analysis of street integration degree of Mituosi Road Historic District (under different distances).

	Integration R100	Integration R200	Integration R500	Integration Rn
Average value	11.95	15.7	25.47	45.05
Maximum value	27.75	31.37	43.74	62.96
Minimum value	3.63	3.47	4.32	24.47

Table 2. Analysis table of street integration degree of Mituosi Road Historic District

4.2 Comprehensive Evaluation of "Space-Vitality" of Street Space in Mituosi Road

We categorize and list the primary issues arising from the existing state of the historical streets and alleys of Mituosi Road in Hangzhou in accordance with the above detailed examination of the streets and lanes.

Macro Scale. First, the street space on Mituo Temple Road has a strong accessibility and comprehensive potential due to its urban road network texture; second, the ancient traditional structures were either integrated, removed, or rebuilt. This laid the ground-work for the area's population movement. Finally, the Mituo Temple Road street space has strong accessibility in terms of public transportation conditions. These two transformation behaviors caused the entire street space and its surrounding road network texture, building texture, and spatial scale sense to be destroyed, directly leading to the break of the context.

Mesoscopic Scale. First off, Mituosi Road's street space measures inside the typical acceptable range for a residential street that can accommodate a specific number of people in terms of length, width, and building height. Second, the management of motor vehicles in Mituosi Road's street area has improved the street's safety features and enhanced its overall vibrancy.

Microscopic Scale. The first thing to note is that the buildings on each side of Mituosi Road's street space have inadequately rich and open facades, which make them ugly and only encourage people to stroll. Second, the comfort under the presumption of safety is not entirely satisfied, and Mituosi Road's street space does not give adequate attention to service facilities. The street area outside the house serves as the tenants' outdoor living room and is crucial for meeting their social needs. In addition to allowing tourists to walk and cross streets, they also need to give them with cozy places to stay, play, dine, and interact with others. The absence of urban furniture, as well as cozy areas for resting and communicating, negatively affects people's perceptions of their surroundings and detracts from the street's inherent energy. Lastly, there is a dearth of landscape greening in the architecture of the street space setting. A venue with a feeling of design, such as the window display design, the landscape and greening design, the facade design of the buildings on both sides, etc., can be the cherry on top in addition to guaranteeing the crowd's safety and comfort.

5 Micro-Renewal of the Historical Streets and Lanes of Mituo Temple Road: Interpretation Based on Space Syntax

From a macro, meso, and micro standpoint, the historic street area of Mituosi Road is currently facing a number of issues. The revitalization of the ancient streets is influenced to varied degrees by the accessibility of the streets, the internal traffic organization, the spatial form, and the mixed degree of functions of the streets. This study aims to provide the following recommendations for planning and transformation based on these factors.

5.1 Optimizing the Traffic Pattern of the Neighborhood, Building a People-Oriented Mobility System

The creation of a varied block vitality system serves as the cornerstone for the ancient streets of Mituosi Road's sustainable development. The block is divided into various functional areas, such as cultural display areas, commercial service areas, community activity areas, and leisure and entertainment areas, by taking into account the historical culture, commercial functions, and community needs[5]. This segmentation considers the historical culture, commercial functionality, and community needs, thereby establishing a multi-layered and diversified vitality system. Convenience and comfort of people's movement are enhanced, seamless connections between various regions are encouraged, and a people-oriented flow system is built to guarantee the accessibility and vitality of the block by optimizing the block's walking environment and traffic organization. Reasonable planning and design of public areas to benefit locals and visitors, to offer a location for relaxation, interaction, and entertainment, and to further improve the block's appeal and interactivity.

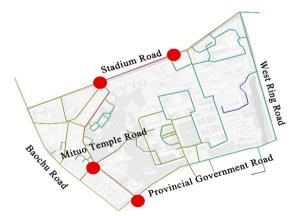


Fig. 7. Schematic diagram of important locations of guidance signs

The intersection of streets and lanes with high integration value and the main road intersections connecting significant scenic spots in the current situation are identified and guided in this study based on the schematic diagram of the local integration degree following the optimization of the spatial structure of the historical streets and lanes of Mituosi Road (Fig. 7).

5.2 Exploring the Potential of Nighttime Economy, Activating the Hidden Vitality of the Neighborhood

Enhancing the block's vitality can be achieved in part by cultivating its hidden and nocturnal vitalities. By encouraging community members and small companies to participate, hidden vitality fosters the energy of everyday life and modest activities. The most obvious way to exhibit culture is through the physical elements of the street; however, when many historic streets and alleys are renovated, the original old buildings are immediately destroyed as "useless" and "dilapidated", and are either replaced by brandnew, immaculately designed antique buildings devoid of character or by more contemporary structures that are simpler to incorporate into contemporary business operations[6]. Though many alleyways and alleys are over-protected and off-limits to tourists, they contain historical antiquities that can be dug and exploited on both sides. With the commercial revitalization of streets and alleys, these tangible components as cultural icons progressively recede and vanish from people's perceptions.

Simultaneously, assist small firms in strengthening their business capacities and augmenting the neighborhood's commercial life by means of suitable policies and resources. By improving the lighting of nighttime public spaces, expanding nighttime activity venues, enhancing nighttime cultural and entertainment projects, drawing more residents and visitors, and boosting the nighttime economic and cultural vitality of the block, night vitality creates a safe, comfortable, and dynamic nighttime environment.

5.3 Integrating Hangzhou's Cultural Heritage, Innovating Business Formats to Promote the Prosperity of Business and Tourism

The commercial layout of Hangzhou's historic streets and lanes should center around the city's culture, investigate various approaches to reflecting it, elevate culture to the status of a primary commodity, realize the concept of "business with culture" through connotative development, blend preservation of historical details with contemporary cultural elements, and never stop learning and growing. In order to integrate culture with the sustainable development of streets and alleys, we should first thoroughly examine the historical data, unearth any relevant cultural resources, and investigate potential strategies for enhancing the cultural experience, promoting the entry of creative industries, hosting cultural fairs, collaborating with design weeks, and providing additional policy support and development space to stores that sell intangible cultural heritage and display items.

Second, in order to improve social cohesion, assist neighborhood organizations in executing a range of artistic, cultural, and athletic endeavors. Since people are the source of vitality and people are diverse, social, and subjective, meeting the behavioral needs of different groups of people through improvements to the space, culture, and business conditions of streets and alleys is one way to enhance vitality[7]. These needs include those of residents for their daily needs as well as those of tourists for their consumption

and tourism needs as well as their needs for social entertainment. Rather than gauging the level of vitality by the flow of people, the streets and alleyways can only be genuinely made more vibrant by improving the crowd structure and behavior patterns within them. A vibrant and fascinating area is characterized by a wealth and diversity of vitality. Second, different kinds of vitality can be generated by introducing diverse cultural, artistic, commercial, and recreational activities. Community fairs, folk street art festivals, traditional handicraft displays, and themed events can be organized to attract groups of all ages and interests, thereby increasing the neighborhood's appeal and level of engagement.

Different forms of energy can be blended inside the block through thoughtful planning and sensible layout, working together to create a lively and vibrant historical street[8]. The same distinctive products shouldn't be duplicated in alleyways and streets, and commercial homogeneity between them should be avoided. Lastly, it is best to avoid renovating historic structures too often[9]. Moreover, a tracking and evaluation plan should be established to monitor the long-term effects of the update measures. This plan should include criteria for assessing the impact on the neighborhood's vitality and sustainability, ensuring that the project continues to promote the area's development and vibrancy over time. As Jane Jacobs noted in The Death and Life of Great American Cities, old buildings play a crucial role in urban environments. These structures often provide affordable spaces for a variety of businesses, such as book bars, galleries, and specialty restaurants, which may not be able to afford the high rents of new constructions. Despite their modest means, these establishments frequently exude a strong urban and humanistic atmosphere, a key factor in stimulating the vitality of streets and lanes.

6 Conclusions

By putting the three strategies into practice, we discovered that by focusing on "spacevitality" as the fundamental element and adding cultural and format considerations as necessary, we could not only realize the neighborhood's potential but also modernize and sustainably develop it while honoring its historical heritage. The specific tactics of block renewal are guided by the quantitative analysis tools of space syntax, such as integration and connectedness, which offer a scientific basis for comprehending the accessibility and connectivity of street space.

The case study of the Mituosi Road Block demonstrates that "micro-renewal" entails a thorough activation of the block's social, economic, and cultural ecology in addition to a change in the physical environment. It makes us realize that revitalizing historic districts should not only concentrate on their physical aspects but also on their spiritual core, which is the neighborhood's relationship with its citizens and the blending of old and new. Through the construction of a distinctive street area, the optimization of infrastructure, the creation of a harmonious landscape, the excavation of a night economy, and the integration of local culture, Mituo Temple Road is gradually evolving into an energetic, futuristic, and memory-bearing urban zone.

In conclusion, this study offers a fresh viewpoint and approach to the preservation and revitalization of historic blocks within contemporary urbanization, emphasizing the efficaciousness of "micro-renewal" as a way to strike a balance between current development and historical legacies. These tactics achieve the organic fusion of history and modernity by both preserving the neighborhood's priceless historical and cultural legacy and bringing contemporary life to it. In order to provide theoretical support and useful guidance for the renewal of historical blocks in more cities, future research can investigate the unique needs and characteristics of various historical blocks, expand on the application of space syntax, and assess the long-term effects of renewal measures. It also encourages the sustainable growth and vitality of historic blocks while offering abundant space resources and services for contemporary urban living.

References

- 1. Wen T.Old Place Names of Hangzhou Streets and Alleys : A Mirror Reflecting Historical Vientiane[J].GEOGRAPHIC NAME, 2011,(04):70-71.
- Xiong J P. Research on the optimization design of pocket park from the perspective of ' urban acupuncture '-Taking Mituo Temple Park in Hangzhou as an example[D]. Zhejiang : Zhejiang University of Technology, 2022.
- Zheng Yinfang (2017). Cultural Heritage Protection and Reshaping of Place Spirit: Exploration of the Concept and Practice of Building Amitabha Temple Park in Hangzhou Hangzhou Wenbo (02), 88-94.
- 4. Yin C L, Xu W Q,Huang J X.Exploration of a new model of planning management under the background of intelligent planning[C]//China Urban Planning Association, Dongguan Municipal People 's Government. Sustainable Development Rational Planning - 2017 Annual Conference of Chinese Urban Planning (05 Application of New Urban Planning Technology). Party Branch of Changsha Urban Planning Information Service Center ; changsha City Planning Information Service Center ; changsha City Planning Information Service Center Project Management Department,2017:8.
- 5. Mihalis, K. (2005). Branding the city through culture and entertainment. Journal Aesop, 5, 1-7.
- 6. Hammoud, J. (2024). An Experience of the Conservation of Historic Buildings Facades in Old Saida City. International Journal of Applied Science, 7(1), p8-p8.
- Barliana, M. S., Rahmanullah, F., Nuryanto, N., Mardiana, R., & Dwidayati, K. H. (2024, May). The Subjective Quality of City and Its Correlation with Citizen Happiness. In IOP Conference Series: Earth and Environmental Science (Vol. 1351, No. 1, p. 012006). IOP Publishing.
- 8. Larco, N., & Knudson, K. (2024). The Sustainable Urban Design Handbook. Taylor & Francis.
- 9. オウ,エン. (2021). Performance-based redevelopment of waterfront space in urban core areas of Chinese Cities.

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