

Research on spatial image and cultural identity between new and old cities:

A case study of Xiamen, China

Whenchen GONG, School of Architecture, Southeast University, China

Han GAO, School of Architecture, Southeast University, China, presenter

Abstract

This study explores the dialectical tension between global spatial flows and local culture in contemporary urban spaces, using Xiamen's Jimei New Town and Zhongshan Street Old District as focal areas. By analyzing perceptions and identity among tourists, local residents, and planners, the research examines how Xiamen's planning and policies guide the reconstruction of local culture. Coding and keyword analysis of interview data reveal that old and new towns serve as opposing spatial cognitive labels, each with distinct imagery and cultural identity associations. Yet an inverse correspondence emerges: the new town is perceived as embodying a sense of traditional place, while the old town represents a forward-looking, modern cultural image. This reflects a reconfiguration of global-local meanings under the different spatial representations of each town. The study further interprets the "space-culture" processes and causal mechanisms shaping these dynamics, considering both macro-level influences, such as capital and policy, and micro-level actions of individual agents.

Keywords

New And Old Cities, Spatial Image, Cultural Identity,

1. Introduction

1.1. Background

As China's urbanization process enters the second half, that is, the urbanization rate exceeds the target of 65% in advance, the urban spatial planning and land use planning within the scope of the city control and intervention methods are increasingly mature. Specifically, the government-led strategy of combining the new city and the old city is favored by more and more cities, such as Tianjin, Shanghai and Xiamen. In the process of the development of the new city, the relationship with the old city has also undergone subtle changes, both in functional structure and spatial pattern. Especially after the urban structure of dual city is formed, the driving force of industrial development, consumer demand, functional transformation, diversified investment mechanism, as well as the concept of people-oriented and sustainable development continue to emerge, prompting significant new changes in urban space and giving birth to new urban space forms such as urban new district, high-tech district, new central district and new residential district. This has a very significant impact on the original urban spatial structure, and forms an intuitive contrast with the old city, creating a unique Chinese dual city appearance and the potential of cultural integration.

The new city is an incremental space formed through large-scale construction activities and "empowerment" under the institutionalized unit of administrative boundaries, while the old city is formed by the accumulation and precipitation of traditional elements, and plays a key protected and carefully revitalized role in the realistic time series and historical cultural concepts. Although the new and old cities are different in physical space, they are in the same political system framework in development strategy, economic function, spatial strategy and other important aspects, and are closely connected with each other. Because of this, the "dual city" model often naturally organizes a binary space image system. This system subtly implies two distinct but reciprocal cultural landscapes: on the one hand, the old city culture, as a symbol of tradition, carries the historical weight and memory; On the other hand, it is full of hope and future-oriented new city culture, showing the spirit of innovation and pioneering.

1.2. Objective

However, it is worth noting that, as a bottom-up practical force, when people experience the spatial-cultural order constructed by the government in person, the cultural identity generated will be more complex and diverse. This kind of complex cultural identity and the established space image constitute a huge tension, causing a series of problems worthy of in-depth exploration and research.

Therefore, this paper focuses on the neighboring space of the new and old cities and the heterogeneity of local culture, interprets the different forms of cultural identity bearing collective memory in the spatial context of the new and old cities, and further focuses on the measurement and characterization of the local identity of the new and old cities. This study selects Xiamen, China for empirical analysis, and takes the central district in Jimei new city and the tradition districts in Zhongshan Street as typical representatives. In the way of case study, we will deeply explore the reasons and interaction mechanism of the binary formation of cultural and spatial image.

2. Literature review

2.1. Characteristics of the relationship between new and old cities

The relationship between new and old cities is complicated, but they also have common features. For example, in the comparative study of historical urban evolution in Britain and Iran, radical transformation of urban structure in the name of modernization has brought disintegration and alienation to the old core, and there are also cases of re-integration of old cities and harmonious coexistence between new and old cities in the urban center grid. The spatial transformation of the old city not only intensifies the fate turn of the historic core in terms of physical form, but also puts forward more requirements for the aggregation and reorganization of the spatial and cultural elements of the new city in this set of open social systems (Kayvan, 1998). The concept of continuity explains that the spatial structure of the city is a dynamic product of the interaction between the forces that tend to change the physical structure of the city and the forces that tend to retain the urban structure, which fully demonstrates the nature of the unity of conservative and radical dualities in urban disciplines and practices (Kian, 2001). Cities have different growth sites in different periods. While maintaining certain spatial inertia and inertia, government policies and planning can better promote the transfer of development core, whether it is the protection and revitalization of old cities or the expansion and spread of new cities (Bai & Xu, 2023).

2.2 New and old city space and culture

The perception of urban space and cultural image is based on the processes of observation, memory, attitude, and feeling, which are directly created (Cavallo et al., 2014), which means that it is impractical to

analyze urban space and cultural subjects in isolation from the macro picture of individual experience and experience. as a consequence of urban symbolic ecology and hypercity, as a consequence of urban symbolic ecology and hypercity, it should be emphasized that special and renewed attention needs to be paid to these participants and the implicit roles they play in urban Spaces, who are not powerless to the top-down process of meaning giving and communication and the bottom-up production and consumption of symbols (Peter, 2014).

As to whether a single cultural image of the old city or the new city can represent the whole urban space, different scholars have diametrically opposed views. Some scholars take Semarang City in Indonesia as an example. Through a questionnaire survey of tourists and residents, it is confirmed that the old city does not have a decisive influence on the image of the city, but relies on some visually attractive elements, such as landmarks such as churches and cafes (Nugraheni & Hartanti, 2023). In the case of Taipei, the historical context of western development makes certain buildings or places become the label and image of Taipei city. In the different interpretation and presentation of images, there is a tension about the problem of "visibility", which reflects the ideological level of struggle. From the perspective of spatial design of the urban built environment, the public architecture and landscape design proposed in recent years, while pursuing an "international" and "modern" image, also represents a "traditional" image (Yu, 2019).

It should not be ignored that the cultural risks and challenges faced by the old city not only exist in the internal pressure of the new city, but also come from exceeding the geographical space restrictions. At this time, the importance of maintaining the unity of the internal cultural image with the new city is particularly prominent, indirectly creating the possibility of the new city inheriting the urban tradition and context (Zgheib, 2021) . As the compression of time and space deepens, the invasion of new global cultural industries by foreign influences and images disrupts traditional custom orders and ways of life, which traditional communities find too tempting to refuse but too difficult to contain. Global consumerism, though constrained by an uneven "geography of power," propagates the same ideas. A culture and its location, unable to maintain imaginary purity in the face of dramatic change, can only respond by emphasizing cultural openness through cross-regional connections (Crang, 2013).

3.Methodology

The research methods primarily adopted qualitative approaches, including field surveys, questionnaire surveys, and in-depth interviews to gather collective memories and cultural impressions from residents regarding the central district in Jimei New City and the traditional districts in Zhongshan Street. The aim was to assess the extent to which these perceptions deviated from expectations, particularly focusing on the discrepancies among different groups both within and outside the new and old cities. In addition, this study used an AI generative model to increase the readability of the paper.

Structured and semi-structured questionnaires were used to collect samples from selected areas in the new and old cities, resulting in a large volume of textual data and detailed interview transcripts (Bokhove & Downe, 2018) . After collecting these materials, the corpus of interview texts underwent coding analysis and keyword statistics to summarize the relationship between the spatial relationships of the new and old cities and their cultural imagery characteristics (Polkinghorne, 2005) . The number of sources and reference points were tabulated, and axial coding was further employed to analyze the local memories and cultural identities of tourists and residents.

Through interactions with various stakeholders, such as tourists, local residents, and planners, the study explored the individualized experiences of place symbolism and the spatial planning strategies of common cultural symbols of modern civilization. This approach aimed to identify the conceptual errors that arise in the gap between these two perspectives and to compare and contrast the representations of the physical spaces and cultural codes in the new and old cities. A comprehensive analysis was conducted based on the statistical results of the corpus.

4.Imagination and recognition between the old and new city

4.1. Spatial image of Zhongshan District and Xiting District

This research targets two major groups: the external tourists and the local residents. Travelers and residents were interviewed in the central area of Jimei New Town and on Zhongshan Street, along with some urban space planners in charge of management and planning. The interviews took place in April 2024 and included 27 participants: 11 local residents, 10 tourists, and 6 planners. The coding and keyword analysis output is reflected in Table 1 below.

Table 1 Keywords analysis based on interview

Select Encoding	Spindle encoding		Number of sources	Reference points	Keywords	
	Zhongshan District	Xiting District			Zhongshan District	Xiting District
International image	Commercialized historic district	Advanced industry-city integrated new city	20	43	Literature and art, southern Fujian, night scenes, Internet celebrities	International, Bay New Town, hot spot for buying a house
	The function of gentrification	A successful new city model	18	35	Commercialization, cafes, restaurants	Convenient transportation, Jimei old area, university town, subway, education, ecological advantages
Local characteristics	The history of the island area continues	The creation of a bay that alternates between the old and the new	17	32	Nostalgia, ancient houses, nostalgia, old streets, seaside	Jiageng, architectural culture, the combination of old and new, old university
	The value of culture is preserved	The collective perception of citizens is reshaped	8	15	Old customs, own shops, chess and cards, street activities, Hokkien dialect	Modern, white-collar, elite, business

Political conception	A model of urban renewal	The dominant position of the software information industry and business	21	26	Repairs, rectifications, funds, housing, urban living rooms	Urban transformation, economic transformation, software industry, tourism, commerce and trade, manufacturing
	The roots of the core urban area	The central district of the new town	14	19	Pedestrian demonstration area, cultural IP, block culture, consumption	Talents, beautiful environment, cross- island development, Bay Area economy

According to the respondents' views on the new and old city corpus, the classification analysis shows that the new and old city of Xiamen is a binary urban space system, symbolizing a limited set of spatial codes. Zhongshan District became the commercial and cultural center of Xiamen in the early 20th century, showing the architectural features of China's southern Fujian and Western styles. The physical space system of the area includes traditional Nanyang style arcade buildings representing the "old village", ground-level shops for social and small commercial activities, and the pedestrian-friendly historic Zhongshan Road, which serves as the urban backdrop for the daily life of local residents. With initiatives for urban renewal and gentrification, many buildings have been demolished or renovated with a conscious application of modern architectural principles. However, with government efforts to preserve this area and tourism-oriented business strategies, the spatial language of small-scale, body-scale experiences has been further emphasized. In contrast, Xiting Central District in Xiamen's Jimei New Town is dominated by modernist office buildings, large shopping centers, and high-end residential areas. Xiamen's developmental aesthetics is inspired by Chan Ka-kee and emphasizes the "fusion of styles" (similar concepts). As a result, the spatial operation of the new town reflects a postmodern approach, with the ground floors of the high-rise buildings decorated with red brick eaves in the southern Fujian style, while the upper floors strictly follow the modernist aesthetic. The new city's spatial functions are closely integrated with financial, trade, and technological exchanges, with ample residential areas, positioning it as the core of the city's modern economy connected to the global production network. Therefore, under the traditional architectural decoration, the spatial code of the new town is still dominated by modernist language.



Figure1 Picture of Zhongshan District



Figure 2 Picture of Xiting

4.2 Spatial identification of residents and tourists

Through a corpus analysis of respondents' responses to new and old towns in Xiamen, this study finds that these areas are a binary system with distinct urban spatial coding. Zhongshan Street, a commercial and

cultural center during the opening of Xiamen's port in the early 20th century, blends southern Fujian and Western architectural styles. Featured elements include Nanyang style arcades symbolizing the "old village," ground-floor shops for social and commercial use, and the pedestrian-friendly Zhongshan Road Historic District that supports the daily lives of local residents. With urban renewal and gentrification, many buildings have been demolished or modernized, and due to government-led conservation and tourism-oriented planning, a smaller scale spatial language has been emphasized to embody experiences. (Figure 1)

In Jimei New Town, Xiamen, the central district of Xiting represents modernist spatial norms with high-rise office buildings, large shopping malls and upscale residential areas. Influenced by the development concept of Chen Jiageng's "integrated style", the new town presents a post-modern collage style. The high-rise building base integrates the red brick eaves of southern Fujian, and the upper floors adhere to modern aesthetics. The main functions of the new city are finance, trade and scientific and technological exchanges, making it the core of Xiamen's integration into the global economic order. Thus, despite the traditional trappings, the language of modernism dominates its spatial code. (Figure 2)

In general, the new and old cities of Xiamen have formed an intuitive binary spatial coding system. The old town is associated with local elements such as streets and historic buildings, while the new town is associated with modern and global themes. However, the boundaries between these codes are blurred, and they permeate each other's spatial structure. Interviews with planners involved in Xiamen's urban master plan and new town planning revealed that this spatial code framework was consciously guided by the planning and design authorities. Unlike other cities where old and new towns are isolated, Xiamen's integrated approach reflects the government and design team's recognition of the city's multiculturalism and spirit, aiming to bridge the cultural segregation between old and new areas.

The study further divides respondents into tourists and local residents, analyzing how each group relates to cultural identity. Both tourists and locals describe Zhongshan Street as "art," "night lights," and "fashion," followed by its association with commerce, cafes, and restaurants linked to the consumer economy. However, visitors tend to interpret the spatial code of the old town as a consumerist spectacle, treating it as a constructed theme park experience that emphasizes the act of observing its cultural context. This commoditized experience is often homogenized for visitors, who may encounter similar historic neighborhoods elsewhere, creating a resistant identity.

Locals have similar descriptions, but have a more positive view of the area, seeing it as a cultural landmark that embodies Xiamen's uniqueness. Instead, visitors are more attuned to the modernist spatial code of the new town because it aligns with their everyday experience of modernity and offers a relevant living environment. For locals, the central district of West Pavilions supports their practical needs - jobs, education and transportation - especially as urban renewal has seen many people move from the old town to the new. Zhongshan Road is a nostalgic place full of imagination, while the new town is the root of their life experience and local identity.

In conclusion, the opposing interpretations of the spatial systems of the old and new towns reflect the conflict between individual experience and the top-down dominance of spatial production. Xiamen's spatial code framework juxtaposes historic local symbols with a globalized cityscape, taking residents and visitors away from their sense of place. The old town reflects a government - and capital-driven consumption space, while the new town is positively welcomed for providing a framework within which individuals can organize their daily lives and connect with a modern Xiamen identity.

5. Dynamics from perspective of political economy

In the subsequent analysis, the focus is on the conflict between political-economic forces and living experience. Through the textual examination of local and migrant populations in Xiamen, as well as field interviews with planning institute personnel, the study further identifies the dynamics underlying the misalignment between the spatial code systems of old and new urban areas and their spatial imagination. Drawing on Henri Lefebvre's theoretical framework of the dialectics of the triad of space (Lefebvre, 1991), the analysis examines the conflict between the perceived space from the perspective of the people and the representative space.

5.1 Cognitive impressions driven by economics

The Xiamen government's approach to controlling cognition is by constructing a top-down spatial representation, shaping an envisioned space. The organization of cultural spaces by the government needs to demonstrate a vision of modernization while also considering the characteristics of space protection, which is selectively accepted. Traditional historical spaces require a balance with cultural promotion, while modern commercial spaces need to consider the selective use of historical elements.

The Xiamen municipal government is at the forefront of implementing a unified planning policy. In this process, strategic control has replaced the drawbacks of a fragmented planning system, where spatial policies and authorities overlap. Consequently, top-down spatial organization activities and large-scale urban growth actions have shaped the local cultural landscape (Wei, 2012). The dual coding system of Xiamen's old and new cities actually reflects the government's pursuit of spatial imagery, demonstrating its preference for modernization and the isolated protection of cultural spaces, two distinctly different demands within isolated spatial structures.

From the perspective of planners and decision-makers, the government's drive to shape new urban spaces is rooted in local political interests (Barthel et al., 2005). Beneath the appearance of globalization is the intervention of political power in shaping planning objectives and carriers of identity imagery, shifting from a global image to planning judgments that align with the local political situation (Figure 3).

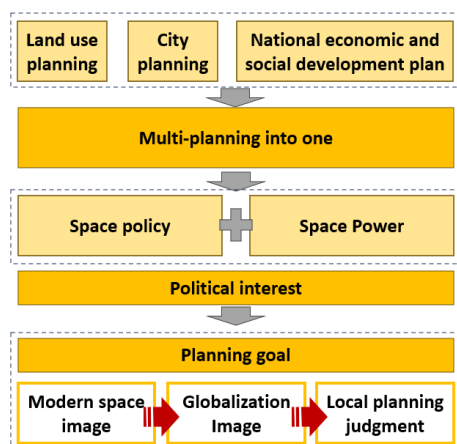


Figure 3 The process of shaping the new and old city image space under the government

5.2 Cognitive solidification of political subjects

For the economy, it is the market that dictates spatial preferences based on economic profitability demands and the functional characteristics it bestows upon spaces. In Xiamen, the integration of localized spatial elements in new town construction and old city renewal practices is a crucial strategy. This aims to

protect and promote local culture while enhancing the city's living quality and attractiveness. The planning and construction of new towns are not only about the expansion of physical space but also the continuation of culture and history (Stenseke, 2009). In this process (Figure 4), architectural design becomes key to showcasing local characteristics. Designers employ Southern Fujian architectural styles, skillfully integrating traditional elements such as red bricks and swallow-tailed ridges into modern architecture, creating a cityscape that is both contemporary and imbued with local identity (Della & Trunfio, 2018). These buildings not only provide residents with a living environment that offers a sense of cultural identity but also serve as symbols and landmarks of the city's culture.

The placement of public art is also an indispensable part of new town construction. In parks, squares, and other public spaces, sculptures and murals are used to tell Xiamen's stories, reflecting its rich history and culture. These artworks not only beautify the urban environment but also become focal points for residents' daily leisure and socialization, strengthening the community's cultural cohesion (Borup, 2006). Additionally, the planning and construction of green spaces are an important aspect of new town development. By preserving and increasing green areas, such as building parks featuring local plants from Xiamen, the ecological value of the city is enhanced, and residents are provided with more spaces for leisure and entertainment, improving the quality of life.

Old city renewal focuses more on cultural protection and revitalization. In this process, the preservation and restoration of historical buildings are central tasks. Through meticulous restoration efforts, historical buildings in old urban areas retain their original appearance while being given new functional uses, such as being transformed into cultural exhibition halls, cafes, or art studios. These renovations not only protect the city's historical heritage but also inject new vitality into old urban areas. Community revitalization is another important aspect of old city renewal. By encouraging community residents to participate in renewal projects, such as through community activities and workshops, not only is community cohesion strengthened, but community culture is also protected and passed down. Moreover, the improvement of transportation facilities is key to enhancing the living quality of old urban areas. By adding bicycle lanes and pedestrian zones, the accessibility and comfort of old urban areas are increased, and more environmentally friendly modes of transportation are encouraged.

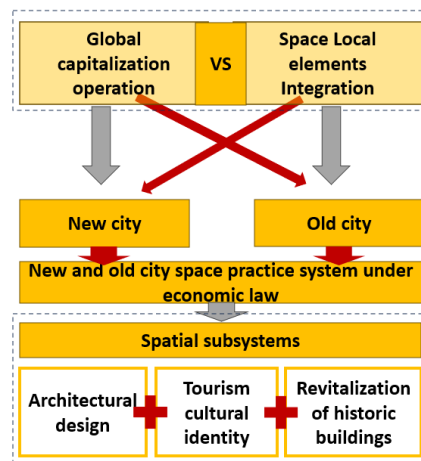


Figure 4 The formation process of cultural identity driven by economy

5.3 The generation of perversion structure of human spatial experience and spatial cognition

With the support of political and economic spaces, planning policies have become more entrenched in their consistent connection to spatial image and cultural identity within a highly integrated dual-city region, inevitably leading to conflicts with everyday lived experiences. The delineation of roles among external tourists, locals, and planners facilitates our exploration of the interactions and relationships between subjective perceptions and rational policies, yet it also hinders attention to the integrated existence of individuals as a whole (Braun, 2008). People serve as carriers of complex networks of nodes influenced by market, social, and governmental actions, thus bearing intricate multi-path dependencies and resource occupation mechanisms, which similarly affect cultural identity in both old and new cities. Furthermore, individuals occupy intermediary points in planning practices and spatial imaginations, simultaneously acting as points of inversion that alter the seemingly natural and inherent shaping order of spatial creators (Figure 5). It is precisely the existence of these points of inversion that explains the reasons for the multiple opposing reversals, where a singular logic emerges from the spatial derivations of old and new cities that are vertical to the inherent institutional framework. The parallel inherent paths of the old and new cities intersect in three overlapping dimensions, generating a social-local network identity system within the inverted concepts of multiple participants. This not only reveals a complex leap in scale from micro to macro but also deeply embeds itself into the inverted rather than opposing local identity structure of Xiamen, attempting to smooth the ripples created by the fluctuating local planning practice models shaped by the market, society, and government, alongside the contemporary mainstream theoretical discourse.

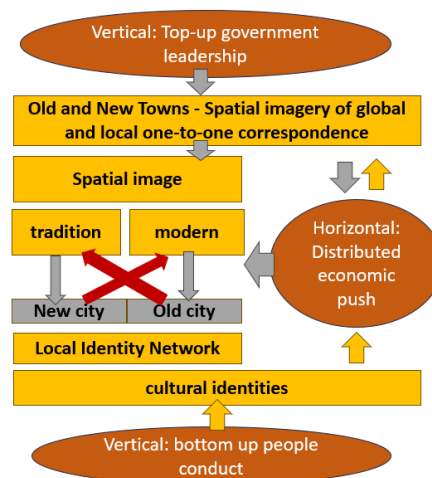


Figure 5 The inherent and inverted paths of spatial imagery and cultural identity in the old and new cities of Xiamen

Declaration of generative AI in the writing process

During the preparation of this work Gao Han used ChatGPT 4o Model in order to Improving readability and eliminate grammar mistakes. After using this tool/service, Gao Han reviewed and edited the content as needed and takes full responsibility for the content of the publication.

6. References

- Bai, X. and Xu, H. (2023) 'Understanding spatial growth of the old city of Nanjing during 1850–2020 based on historical maps and Landsat data'. *The Egyptian Journal of Remote Sensing and Space Science*, 26(1), pp.25–41.
- Barthel, S., Colding, J., Elmqvist, T., and Folke, C. (2005) 'History and local management of a biodiversity-rich, urban cultural landscape'. *Ecology and Society*, 10(2).
- Cavallo, R., Komossa, S., Marzot, N., Meta Berghauser Pont, Joran Kuijper and Technische Universiteit Delft. Faculteit Bouwkunde. (2014) *New urban configurations*. Amsterdam: los Press, Under the Imprint Delft University Press.
- Crang, M. (2013) *Cultural Geography*. Routledge.
- Braun, E. (2008) *City Marketing: Towards an integrated approach*. Erasmus University Rotterdam.
- Bokhove, C. and Downey, C. (2018) 'Flexible Coding of In-depth Interviews', *Sociological Methods & Research*, 50(2), pp. 708–739.
- Della Lucia, M. and Trunfio, M. (2018) 'The role of the private actor in cultural regeneration: Hybridizing cultural heritage with creativity in the city', *Cities*, 82, pp. 35–44.
- Kayvan, K. (1998) *Continuity and change in old cities: An analytical investigation of the spatial structure in Iranian and English historic cities before and after modernisation*. Dissertations & Theses.
- Kian, T. (2001) *The promise of the city: space, identity, and politics in contemporary social thought*. Ca, Usa: University of California Press.
- Lefebvre, H. (1991) *The Production of Space*. Oxford: Blackwell.
- Liu, Y. (2019) 'City Image Analysis of Western Taipei'. *International Review for Spatial Planning and Sustainable Development*, 7(4), pp.18–36.
- Nas, Peter J.M. (2011) *Cities full of symbols: a theory of urban space and culture*. Leiden, Netherlands: Leiden University Press.
- Nugraheni, C. and Hartanti, N.B. (2023) 'Attractiveness of the old town to strengthen the image of the city of Semarang'. *International Journal on Livable Space*, 8(1), pp.21–28.
- Polkinghorne, D. E. (2005) 'Language and meaning: Data collection in qualitative research'. *Journal of counseling psychology*, 52(2), 137.
- Stenseke, M. (2009) 'Local participation in cultural landscape maintenance: Lessons from Sweden', *Land Use Policy*, 26(2), pp. 214–223.
- Wei, Y.H.D. (2012) 'Restructuring for growth in urban China: Transitional institutions, urban development, and spatial transformation', *Habitat International*, 36(3), pp. 396–405.
- Zgheib, H. (2021) 'Rebranding City Image: Keeping its Old'. *The International Journal of Architectonic, Spatial, and Environmental Design*, 16(2), pp.95–103.