

An Initial Exploration of Progressive Cultural Industry Cluster Models in Historical Districts from the Perspective of Catalysts: Taking Feng Yuan Street-Liwan Lake District in Liwan District, Guangzhou as an Example

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Abstract

After more than 30 years of urbanisation, China's urban development path is changing from the traditional pursuit of single high-speed growth to the pursuit of high-quality spatial quality improvement. Most of the historic districts, which are the heritage and memory of the city, have lost their original cultural authenticity during the last round of urbanisation. There are such practical dilemmas as lowering the quality of the districts, serious gentrification and degradation of the living environment. After studying the existing models in China, and taking into account the development of the Feng Yuan Street-Liwan Lake Historic District in Liwan District, Guangzhou, and based on the cultural catalyst effect of the district, it is found that the progressive cultural industry cluster mode of business optimization is conducive to the development of the historic district, thus promoting the vitality of the district and improving its quality. On this basis, we explore the relevant institutional supply and guarantee mechanism to further construct a new mode of industrial development in the historic district.

Keywords

Business model, Optimisation strategy, Historic district, Cultural catalyst, Progressive regeneration, Cultural conservation

1. Introduction

1.1. Theoretical Review and Practical Frontiers of Cultural Catalysts

As early as the 1960s, American urbanist Jane Jacobs proposed the importance of culture in urban development, with a particular emphasis on the cultural characteristics of historic districts (Jane Jacobs, 1961). Following a series of practical applications, countries such as the United States, the United Kingdom, and Germany expanded their understanding of culture to a two-way interaction between theory and practice, recognizing culture as valuable capital that can promote regional and local development (Juliet Davis, 2009; Izadi Mohammad Saeed. et al., 2018; Shemirani Seyed Majid Mofidi et al., 2021). Conversely, the cultural experience brought by cultural capital in historic cities can generate new concepts for urban development, emphasizing the spiritual and emotional connections between

people and the environment, as well as deeper psychological needs and aesthetic activities such as a sense of direction and belonging. Since the 1970s, the United States initiated urban regeneration movements driven by cultural policies, achieving notable successes in projects such as the redevelopment of the Inner Harbor areas in Pittsburgh and Baltimore, leading Western countries to gradually consider cultural catalysts as a significant driving force for urban development and old city renewal.

In the 1980s, the term "urban catalyst" first appeared in the work of American architects Wayne Attoe and Donn Logan, *American Urban Architecture: Catalysts in the Design of Cities*, where it was noted that "new elements can be introduced strategically to activate existing elements within the city without changing their essential attributes. Once activated, these elements also bring along the forms, characteristics, and quality of the introduced elements, creating a chain reaction (Ashima Krishna,2016)." This illustrates the crucial role that catalysts play in urban renewal and development. Catalysts can be physical forms, such as buildings or landscape features, or intangible forms, such as unique cultural traits or artistic activities (Espindola, E. ,2022; Izadi, M. S et al.,2021) . In the context of historic preservation and urban renewal, an urban catalyst refers to any element that can improve the urban environment. However, not all urban elements can serve as catalysts; instead, elements that align with local characteristics and history should be selected, achieving comprehensive regional vitality through the method of embedding, thereby promoting harmonious development of the city and its neighboring areas (Miles, S., & Paddison, R.,2005; Beck D,2019).

In contrast, China introduced this theory in the 1990s. Although research on catalytic theory has been relatively recent, insights have been gained from international experiences about the importance of culture in revitalizing historic districts (Kim, G. K.,2006). Based on Wayne Attoe's theory of urban catalysts, further exploration of the types and characteristics of catalysts has led to the conclusion that "point catalysts" are the most moderate approach for intervening in urban design in historic districts. They have minimal impact on the surrounding environment, making them an effective means of historical district renewal (Table1).

Table 1. Cultural catalytic form

Cultural catalytic form	Catalyst Characteristics Diagram	Feature description
Dot-shaped		Transformation and Renewal of a Point Space in Historical and Cultural District
Current		Characterized by point connection or original linear space series, connection
Surface		The Renewal and Transformation of the Area Space of the District and the Surrounding Area Radiated by the Cultural Catalyst Effect

Source: Author drawing.

As for the selection of specific catalysts, through the industrialisation experiments on the intangible cultural heritage, cultural symbols, cultural characteristics and other elements present in the historic districts, it has been concluded that the revival of cultural businesses is conducive to the enhancement of the overall quality of the districts and the reshaping of their vitality (Krishna, A. ,2016; Bohannon, C. L. ,2004). In

addition to reaching a consensus on the importance of local culture, local residents, the government and developers, as pluralistic subjects, need to pay attention to the long-term interests of cultural capital for the city and the district, adhere to rational urban renewal concepts, and ensure the balance of interests of all parties through the corresponding policies and plans, which is the system and management requirements for the maintenance of cultural catalysts in the later stage (Figure 1).

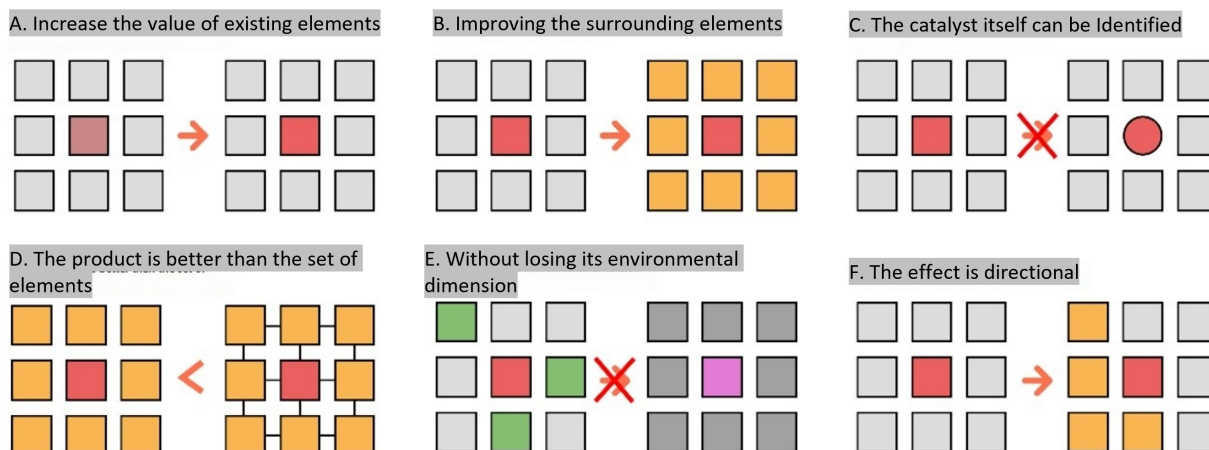


Figure 1. The Utility of Cultural Catalysts in the Renewal of Historic Districts. Source: Author drawing.

1.2. Renewal and Development Patterns of Historic and Cultural districts in China

The integrated real estate development model is led by real estate developers, who utilize substantial capital to relocate all original residents for large-scale intensive development (Overmeyer, K., & Misselwitz, P., 2011). This model mainly involves either the complete functional replacement of historical buildings or uniform high-density industrialized development to redevelop historic districts. However, this real estate-driven approach to renewal comes at the cost of sacrificing the original residents' lifestyle, forcibly embedding new industries and functions to meet modern needs. In the pursuit of maximum profit, developers often neglect the preservation and transmission of historical culture, and the excessive promotion of modern lifestyles leads to the disappearance of traditional ways of life. This, in turn, results in changes to the social structure of the district, triggers localized social conflicts, and, in some cases, leads to excessive gentrification.

Compared to the unified planning, redevelopment, and construction approach of the integrated real estate development model, this approach places greater emphasis on organic renewal, focusing on the appropriate preservation of the district's traditional lifestyle and cultural context. It adopts suitable scales and a moderate, gradual approach to progressively invigorate the district. This model is particularly favored in China, with its advantage being that it centers on the original residents of the district while balancing the exploration and utilization of the district's historical culture. Under the premise of preserving the original neighborhood lifestyle, diversified and flexible commercial development can be carried out. On one hand, this ensures that the historical culture and human customs of the district are well preserved; on the other hand, differentiated revitalization methods can be chosen based on the characteristics of different types of districts, using a "phased and segmented" approach to select appropriate revitalization measures. However, this model faces challenges such as difficulty in sustaining long-term funding for preservation and high technical requirements for conservation. Therefore, it is necessary to encourage and expand multi-party participation, involving the government, experts, and all sectors of society.

Under government leadership, both government and private capital participate in the comprehensive "commercialized" restoration and protection of historic districts, quickly acquiring funds for renovation through large-scale commercial investments. Besides restoring historical buildings, this approach also emphasizes converting residential functions into commercial ones. Unlike the integrated real estate development model, this approach involves phased renewal of the district under government direction.

The commercialized model has advantages such as quick short-term results and high investment intensity, and it is often used in historic districts originally dominated by commercial functions. However, it cannot be ignored that excessive commercialization can severely erode the traditional atmosphere and cultural environment of historic districts. Some districts may also find it difficult to create a commercial atmosphere due to geographical and environmental reasons, which could result in further damage to districts that have already undergone commercialization (Table2).

Table 2. Comparison of Business Development Models in Historic Districts in China

	Real Estate Development	Progressive development	Commercial development
Extent of land concessions	All leased land	Small number of sites offered for sale d for sale	Part of the sites offered for sale
Degree of commercial exploitation	strong	feeble	strong
Participation in the main body of the transformation	real estate developer	Residents, governments, social organizations	Government and enterprise
Relocation of aboriginal people	Relocation of all Aboriginal people	A small number of residents negotiated relocation	Some residents moved after consultation
Investable capital sustainability	strong	feeble	strong
Protection development mode	Preservation of the core building and its surroundings alteration of its internal functions	Retain most of the buildings for restoration and remediation	Preservation of the architectural heritage, restoration of the exterior and complex utilisation of the interior functions
Cases	Shanghai Xintiandi, Guangzhou Xinyi Hall	Suzhou Pingjiang Road	Hangzhou Qinghefang, Guangzhou Shangxiangjiu

Source: Compiled by the author from information.

2. The Importance of Progressively Introducing Cultural Catalysts in Developing Historic Districts

No matter what kind of development mode is used, it cannot be denied that business development is an effective way to protect and revitalise historic districts (Schreiber, F., Fokdal, J., & Ley, A. ,2023). In the context of China's planning from incremental to stock, from the rough to the pursuit of high-quality and refined development, the government will spend more energy into the campaign to improve the quality of

historic districts, at this time, the district industry needs to shoulder the burden of supplying funds for the repair of old buildings in the districts, improvement of the human habitat, the shaping of the cultural brand, and other special actions.

The model of progressive industrial clusters. The progressive industrial cluster model is different from the traditional industrial park model, aiming to build an industrial cluster 'without walls'(Fan, X. ,2020), which is reflected in the openness and accessibility of the historical and cultural district, and even more so in the openness of the operation and management system of the industry. Through government-led, multi-party participation and gradual development, 'point by point' gradually introduce cultural industry-based industries, while taking into account the retention of a certain amount of traditional industries, paying attention to the diversity and characteristics of the overall industry, and aiming to stimulate the new vitality of the historical district (Figure. 2) .

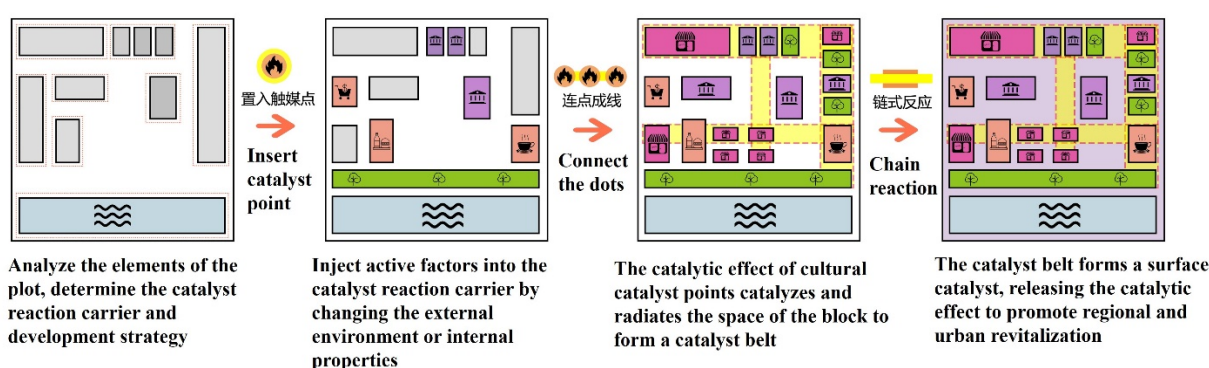


Figure 2. Principles of Progressive Culture Industry Cluster Role. Source: Author drawing.

Cultural Clusters Promote the Quality and Vitality of district. The concept of industrial cluster originated from Mike Porter's 'Competitive Advantage of Nations' in 1990, who emphasised that the core of industrial cluster lies in the spatial concentration of industries, which is conducive to lowering the operating costs of enterprises, and that the complementary supply chain formed by industrial clustering can promote the scale effect and influence of industries within a certain range. For historic districts, because of their unique historical space, they have the advantageous conditions for nurturing cultural industries, and encouraging the aggregation of cultural industries not only enriches their cultural connotations, but also promotes the functional remodelling of the space with new vitality (Kangcai, N. I. E. & Xuehong, Z. H. O. U. ,2019). In addition, spontaneous complementarity and healthy market competition between similar businesses can better promote the overall quality of the district 's businesses.

3. Case study: Feng Yuan Road-Liwan Lake Historic District Liwan, Guangzhou

3.1. Special resources

The Liwan Lake-Fung Yuen Street Historical district is located in the Xiguan area of Liwan (Figure. 3) , Guangzhou, and is divided into two pieces: Liwan Lake and Feng Yuen Street. The core protection scope of Liwan Lake is based on the property boundary of Liwan Lake Park: it contains Laiwan Chung and Renwei Temple and Panshi Restaurant; Fungyuan Street is a mixed commercial and residential historical district that takes into account the commercial and residential functions, mainly based on the densely populated areas of cultural relics and historical buildings in Xiguan Dajia Community and Longjin West Road Riding Street. The history dates back as far as the Southern Han Dynasty (2,300 years ago) as the emperor's backyard, and

most of the current neighbourhood has the architectural pattern and texture of the Ming and Qing dynasties (around 300 years).

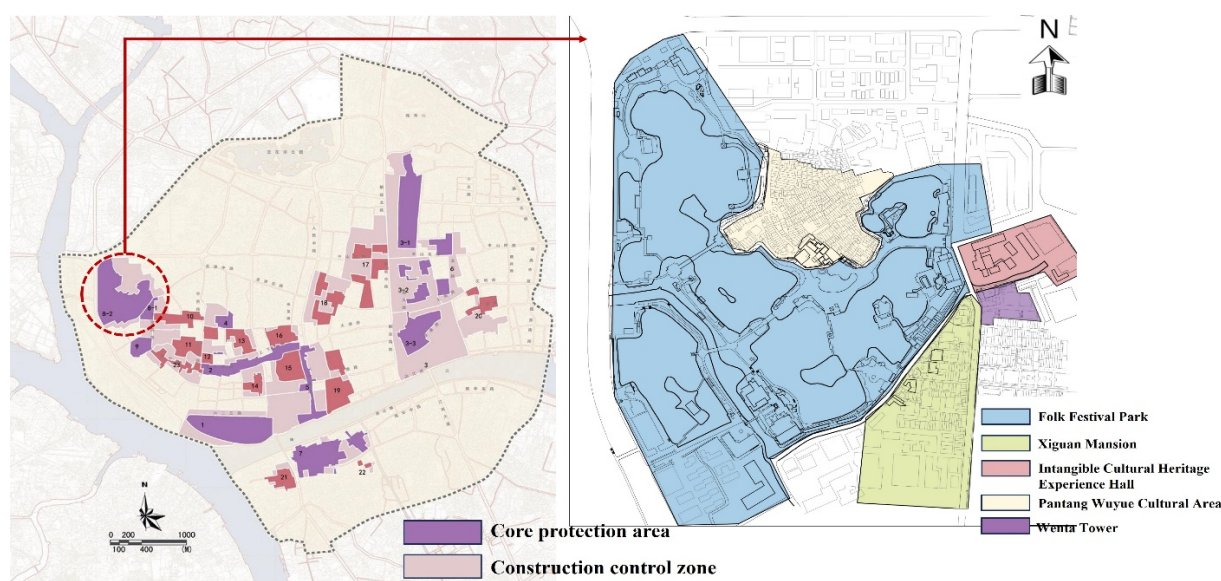


Figure 3. Location Analysis of Feng Yuan Street - Liwan Lake Historical and Cultural Quarter. Source: Author drawing.

It is one of the 26 historical districts delineated in the Protection Plan for Famous Historical and Cultural Cities of Guangzhou with a larger scope. Within the area, there is a collection of iconic tangible cultural landscapes such as Liwan Lake Park, Fengyuan Street, Lychee Bay Chung, the Man Tower, Renwei Temple, Xiguan Daiya, the Riding Floor Street, Lingnan Gardens, and intangible cultural heritage such as Cantonese Opera, Cantonese Cuisine, and traditional handicrafts. As the district is located in the old city of Guangzhou, it is surrounded by many historical districts such as Enning Road, Changhua Street, Baoyuan Road, etc., which have different styles and spatial characteristics, making it a spatial space with a strong historical flavour of the 'old Guangzhou' and Lingnan culture (Table. 3) .

Generally speaking, the district is famous for its man-made built environment pattern and style centred on Liwan Lake, which is formed by the combination of the gardens and public houses surrounding the lake and the two traditional texture areas of Xiguan traditional city and Xijiao traditional village. Among them, Feng Yuan Street retains the traditional Xiguan Dajia residential buildings, and Pantang Village is the only remaining complete Ming and Qing Dynasty water village settlement in the historical city that retains the old historical pattern, street texture and cultural features. In addition, the district is also home to many intangible cultural heritages of Guangzhou, with a variety of activities such as traditional folklore, opera and fine arts, making it one of the few places in the Guangdong-Hong Kong-Macao Greater Bay Area that carries the Cantonese culture (Figure. 4) .

Table 3. Catalogue of tangible and intangible cultural heritage

Typology	Tangible culture elements
Architectural style	Xiguan Daiya (bamboo house), Liang Ancestral Hall (three courtyards), Chen Lianbo Public Hall (Western architecture), Haisan Xiankuan (Lingnan garden), Longjin Road Cavalcade Street, Panshi Restaurant (Lingnan garden-style architecture), Liwan Grand Theatre, Wenta.
Architectural elements	Brick carvings, grey sculptures, Teochew wood carvings, barred doors, Manchurian windows, clear water brick walls, wok walls, hemp stone streets,

	etc.
natural resources	Lai Wan Lake, Lingnan Garden, Lai Chi Wan Chung and others
Landscape resources	Lingnan Bonsai, Yingde Stacked Stone, Lingnan Gardening, Lingnan Landscaping, etc.
Typology	Intangible cultural heritage
traditional music and opera	Cantonese music, Cantonese operas, eight-note gongs and drums
traditional theatre	Lingnan Puppetry Performing Arts, Cantonese Opera
traditional art	Guangzhou marquise carving, Canton embroidery, ivory carving, Guangzhou wood carving, Guangzhou jade carving, paper-cutting
Chinese traditional medicine	Lingnan Tian Moxibustion, Lingnan Fire Needle Therapy, Cai Zhi Lin, Jing Xiu Tang, Xiguan Zheng Bone

Source: Compiled by the author from information.



Figure 4. Historic District Site Photos. Source: Baidu website.

3.2. Methodology

Compared with the rich cultural precipitation, the overall distribution of the business environment in the Liwan Lake-Fung Yuen Street Historic District is fragmented, and there are many types of business but lack of regional cultural characteristics. According to the existing business can be referred to Kim, G. K. (2006)said that the business of the historic district is divided into three major types: general consumption, cultural enterprise, and cultural industries (Table 4) , general consumption refers to the business of for-profit nature that is not very related to the cultural characteristics of the district, including catering and general shops, etc.; the cultural undertakings are the non-profit business that the public can freely visit the culture of the regional characteristics, including museums and exhibition halls, etc.; the cultural industry refers to the business that fits into the cultural characteristics of the historic district, and the business that has the cultural characteristics of the region. Cultural industries refer to those businesses that fit the cultural characteristics of the historic district, or those businesses that have been retained by the public through the long evolution of the district, including old shops, exhibition venues, and so on. According to the field research, the overall general consumption industry is as high as 58%, while the real cultural industry with special characteristics only accounts for 37% (Figure. 5) . Selecting Pantang Road, the most central commercial street in the historic district, and Shanghai Xintiandi North Lane on Pingjiang Road in Suzhou for horizontal comparison and calculation found that the index of its industry diversity is on the low side, and there is room for further improvement.

Table 4. Classification of Cultural Businesses

Typology	concrete content
general consumption	Cafes, Stores, Catering
cultural enterprise	Museums, art galleries, exhibition halls
Cultural industries	Intangible crafts、cultural and creative、Cultural trails, national parks

Source: Compiled by the author from information.

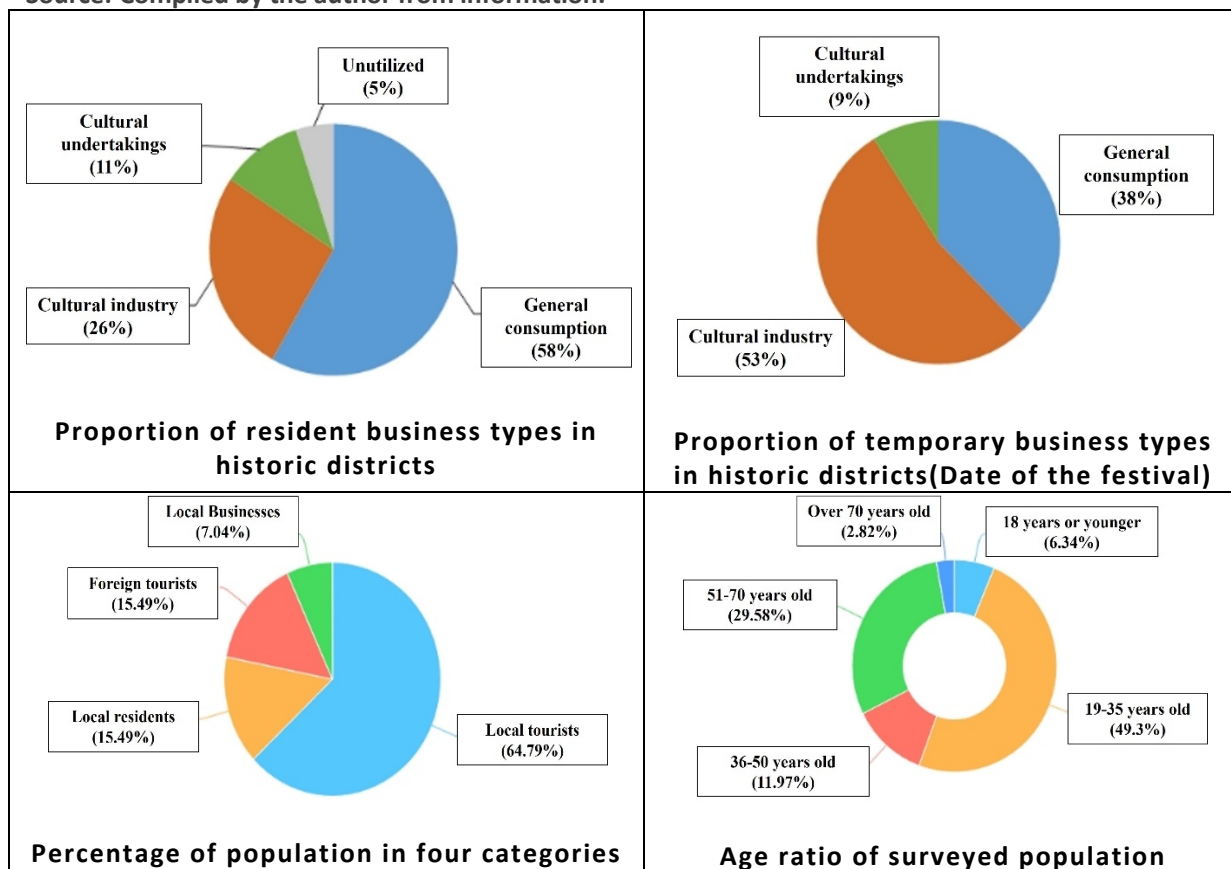


Figure 5. Basic information on survey respondents in the Quarter. Source: Author's drawing.

Questionnaire surveys of user groups often provide a more realistic picture of the overall imagery of a historic district and the perceptual experience needs that different groups expect to have in the district. This design is based on a survey of the perceptual imagery of four groups of people: local residents, local tourists, foreign tourists, and local merchants (350 questionnaires were distributed, of which 345 were valid, with a 98 % recovery rate).

3.3. Findings

Nearly 90% of the respondents were positive about the historical and cultural characteristics of the district, saying that they could feel the local culture of Xiguan in Guangzhou, especially after the micro-renovation of Pantang Wuyao, which resulted in the addition of a rich and diverse range of cultural and creative shops, non-heritage workshops and other forms of business. However, more than 58% of people still do not know the folk culture and anecdotes of celebrities in the district, and visitors' perception of the history and culture of the district comes more from the old shops (53%) or the activities of local residents in the park (26%). In the evaluation of the district's businesses, 79% of the people have a high level of satisfaction with the district's businesses, believing that they are able to show the characteristics of the district and satisfy the needs of consumption better. However, people's expectations for the district mainly stem from the desire to increase the number of cultural industries such as non-heritage cultural experiences, old-fashioned restaurants and small cultural and creative shops (Figure. 6).

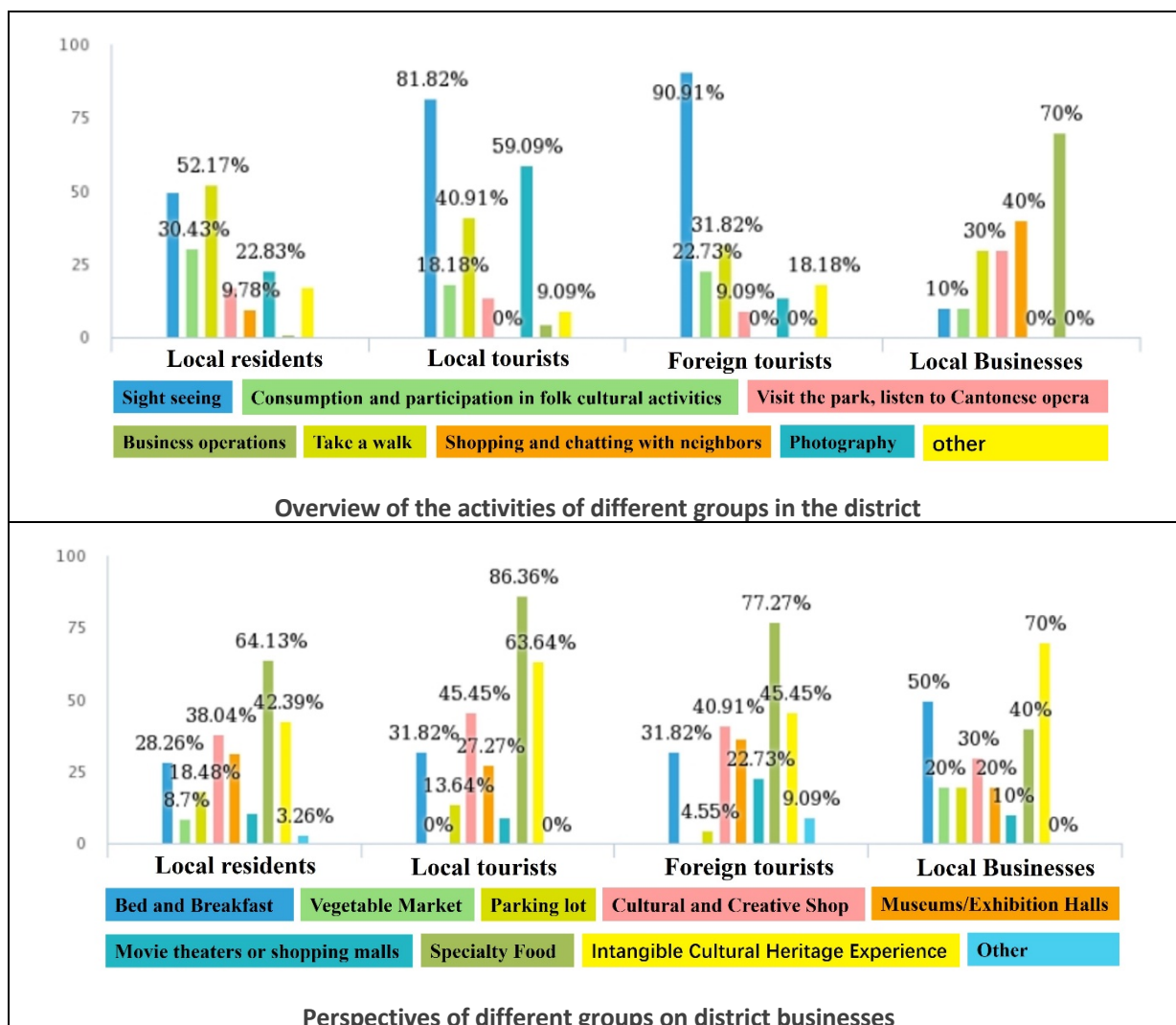


Figure 6. Descriptive statistics of questionnaire results. Source: Author's drawing.

There is a lack of business diversity in this district, especially in the cultural business and cultural industries that display the culture of the district and represent the regional characteristics, and the existing businesses are mainly catering and retailing. From the group survey, we can see that for the aborigines, they hope that the district can have a more convenient living consumption business, and can provide a certain hair salon, food market and other businesses. Most of the tourists are satisfied with the Xiguan local cultural style shown in the district, but less satisfied with the culture that can be felt in its business. It can be seen that the existing business is mostly to meet the tourists to use as the main body, lack of attention to the needs of the aborigines and local merchants.

4. Conclusion and discussion

The core of cultural industry clusters is to focus on the use of cultural catalysts. Different cultural catalyst spaces, such as spaces for traditional festivals and cultural exhibitions (Zhao, Congyu, 2018), can be explored through the revitalisation of original folk activities in historical and cultural districts, and the presentation of the lifestyle of the indigenous people and anecdotes of famous people in the districts. Particular attention will be paid to the shaping of cultural brands such as Panxi Restaurant and Kaiji Desserts, as well as the planning and promotion of folk cultures such as the Brushstroke Ceremony and

the Water Flower Market, and non-heritage cultural experience activities such as Cantonese Opera, Canton Embroidery and Canton Colour. The activation of intangible cultural elements through tangible means can increase the cultural capital and at the same time add a cultural atmosphere to the historical and cultural district. In the building of cultural industry clusters, it pays attention to the use of gradual catalysing forms, and builds a catalysing system of 'connecting lines with points, forming a network with lines, and linking up into surfaces. Firstly, the activation of important cultural nodes in the block is the main focus, combined with the linear spatial catalysts of the Riding Floor Street and the Style Street, to form the catalyst effect within the block, and gradually build the industry cluster (Figure. 7) .

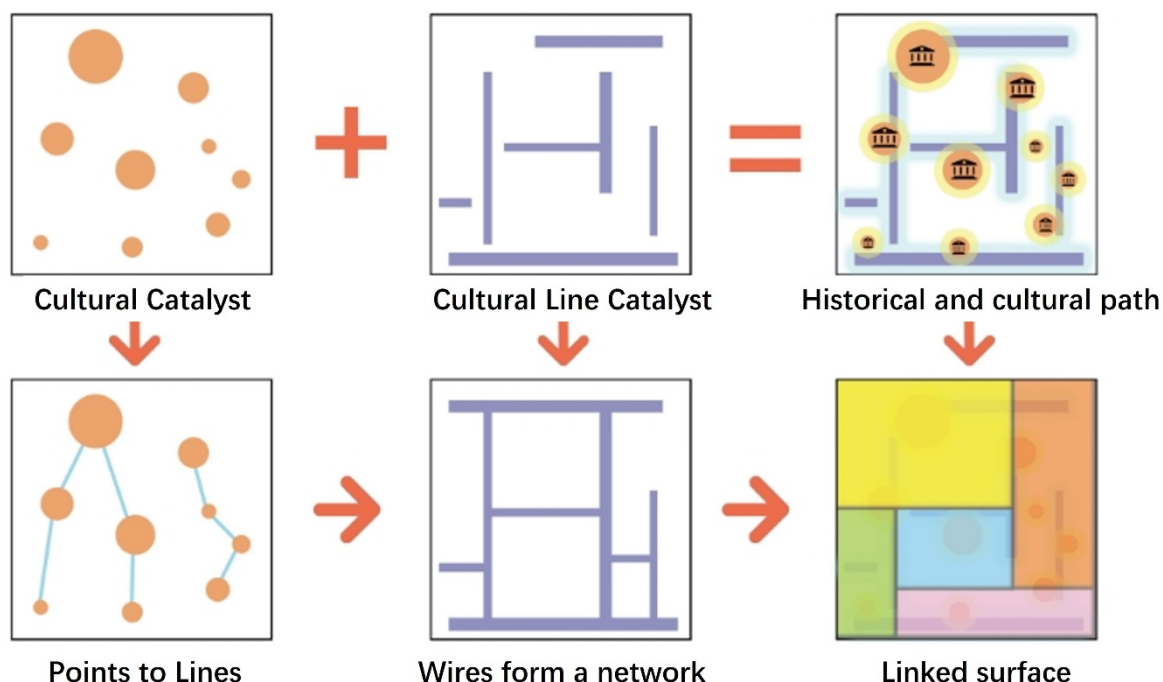


Figure 7. Progressive Cultural Catalyst System Construction. Source: Author's drawing.

In the process of cultural industry cluster development, we should pay attention to the respect and preservation of the traditional life of the aborigines, not only to maintain the interests of the residents, but also to encourage the residents to show their own way of life in the historical and cultural district s, and to run the business forms with the characteristics of the district (Wang, S. F. ,2018). At the same time, the discovery of the district culture and historical memory to the use of optimization and renewal of business needs to be introduced gradually, for the cultural industry and the branding of old brands is also a gradual process. More importantly, it is important not to neglect the later management and maintenance of the business, as well as the establishment of the business access, optimisation and operation system (Figure. 8) .

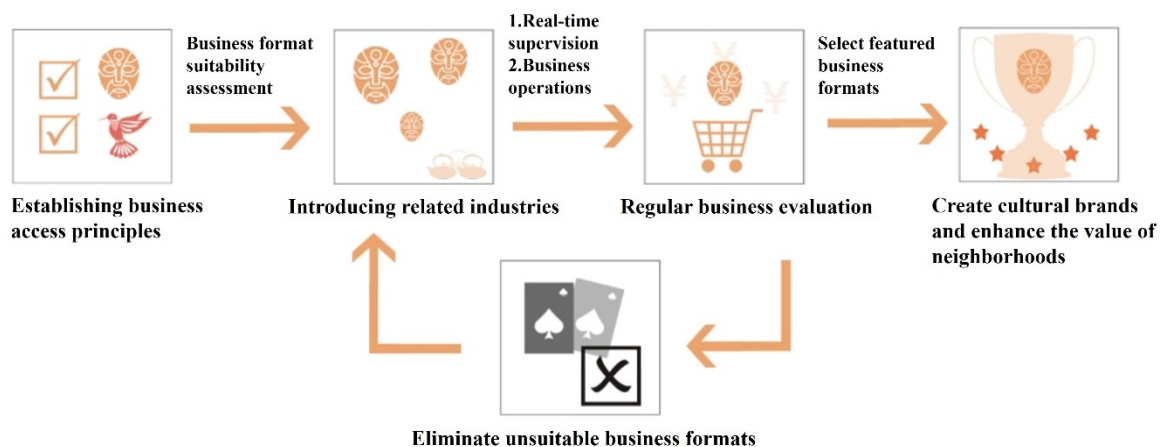


Figure 8. Progressive business optimisation system. Source: Author's drawing.

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